

Application number: 09/376381

Art Unit: 3628

Applicant: Khai Hee Kwan

Examiner: Debra F Charles.

Title: Method, apparatus and program for pricing, transferring, buying, selling and exercising of freight cargo options on the World Wide Web.

REMARKS

Status of Claims as per Corrected Final Rejection Letter Faxed 15 July 2003 but retained the Mailing Date of 18 June 2003 of first Final Rejection Letter herein "Letter".

Claims 29-54 are rejected under 35 USC 112 First Paragraph.

Claims 32,39,40,42,43,52,53 are rejected under 35 USC 102(e) as being anticipated by Walker et al (6085169)

Claims 33-35, 47-49 and 51 are rejected under 35 102(e) as being anticipated by Walker et al (5797127A)

Claims 29-31 are rejected under 35 USC 103(a) as being unpatentable over Walker et al (5797127A), and Lei et al (6487552A) and Powers (5956691A)

Claims 36, 38, 41, 44, 45, 50, 54 are rejected under 35 USC 103(a) as being unpatentable over Walker et al (5797127A) and Walker et al (6085169A)

Claims 47 and 46 are objected.

Response to Letter's Rebuttals at page 2 points 4 and 5 .

Point 4.

The letter states " In this case, references dealing with options, shipping, transportation and risk management would all cover the issues the applicant raised in the claims."

We beg to disagree. The requirement for 103(a) obviousness rejection is one where there must be suggestion to combine the claimed features found in the supporting references. In short, any reference in the area of option must suggest combining with shipping or transport to reach our claims. It is not enough to have separate references cited and without them suggesting such combination. If the standard is merely having said references then Walker's 5797127 would not be patentable since the existence of airline ticket with a reference on options is readily available prior to said filing date. In fact, Walker's examiner had stressed the reason for allowance as " the prior art of record does not teach or suggest of combining the well known future contracts or stock options practice with the purchasing of airline tickets ." (Page 3 of Office Communication Mailed 4/14/98 for application 08 /775591). Similarly, we submit that none of the

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references or prior arts to date show or teach option practice with purchasing of cargo facilities services in an exchange environment.

Point 5.

The Letter states that “ In this case, airline tickets de facto reserve a place on a plane for a future trip and the parallel is relevant to the applicant’s claimed invention ”. This assumption seems to have identify the nature of the problem as the basis of obviousness rather than to consider the differences in the problem itself, each submitting to two different fields. As stated in In re Zurko, 111 F.3d 887, 42 USPQ2d 1476 (Fed. Cir. 1997), the nature of the problem cannot be used as motivation when the problem had not been previously identified anywhere in the prior art. The pertinent question is whether the problem of reserving cargo space has been identified in Walker ‘127 rather than the ‘parallel’ nature of reserving a place on a plane.

Furthermore, defining the problem in terms of its solution reveals improper hindsight in the selection of the prior art relevant to obviousness. See, e.g., In re Antle, 444 F.2d 1168, 1171-72, 170 USPQ 285, 287-88 (CCPA 1971) (warning against selection of prior art with hindsight). By importing the ultimate solution into the problem facing the inventor, the examiner adopted an overly narrow view of the scope of the prior art. It also infected the examiner's determinations about the content of the prior art which is related to options for airline tickets only.

Secondly, the relevancy of the above statement can only mean the examiner has forbiddingly read narrowly into our disclosure which is not permitted when interpreting a claim by assuming reserving a place on a plane is parallel to rail, sea or space carrier. (“Absent a clear disclaimer of particular subject matter, the fact that the inventor anticipated that the invention may be used in a particular manner does not limit the scope to that narrow context.”) See, e.g., Teleflex, 299 F.3d at 1328, 63 USPQ2d at 1382-83; Catalina Mktg. Int’l, Inc. v. Coolsavings.com, Inc., 289 F.3d 801, 809, 62 USPQ2d 1781, 1785 (Fed. Cir. 2002). Nor are claims ordinarily limited in scope to the preferred embodiment. Merely because the specification only exemplified one embodiment is not a sufficient reason to limit the claims to that embodiment (ALTIRIS, INC., v. SYMANTEC CORP., 02-1137, -1138, United States Court of Appeals for the Federal Circuit, DECIDED: February 12, 2003)

In fact, our disclosure made it clear that air-cargo is but one of the embodiments. In our cargo option price calculation we have specifically mentioned weather for space carriers to show that cargo is not limited to air transporter but includes space carriers. It is also well known in the art that cargo need not be transported by plane and the fact that elements found in air travel are not necessarily found for all cargo transporters. For example type of cargo is one element (such as perishable) which distinguishes a

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passenger. A passenger cannot be a perishable or non perishable object. Similarly, an airline would not ask the size and weight of a passenger at the point of selling a ticket.

Therefore, we beg to disagree as there is no evidence to suggest that one ordinary skilled in the art of air line ticketing system would see the same problem as one in the cargo management system. It further ignores the technical, logistics and business considerations in a cargo system by limiting our claimed invention to airlines only. The cargo business is an integrated business encompassing many mode of transportation each with their own peculiarities depending on destination, type of cargo and dimensions.

Analogous Arts for obviousness rejection ?

In re Clay, 966 F.2d 656, 658 (Fed.Cir.1992) Courts consider two factors in determining whether prior art is analogous: "(1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved." In re Clay, 966 F.2d at 658-59; In re Wood, 599 F.2d 1032, 1036, 202 U.S.P.Q. 171, 174 (CCPA 1979).

We submit that buying or selling cargo options in an exchange environment is not in the same field as in purchasing an option for an airline ticket given that both subject matters are different. The most obvious difference is that an airline ticket refers to a seat having fixed size and its designed for a human. Cargo on the other hand can be a live animal (horse), oil, coal, mail, satellite, frozen seafood, gold bullion, a Formula One car or even machinery parts, each having different sizes and weight hence reliance on the appropriate transporter. One would not be able to buy a seat or two to transport them on an aircraft. In fact, cargo transporter usually does not have seats and the fact that it flies does not necessarily make it a passenger aircraft. In Walker '127 it is stated in the disclosure at Col 1 line 8 and quoted here, " The present invention relates to the field of pricing and selling airline tickets. In Walker '169, it is also stated that the field of invention relates to selling goods such as airline tickets...to a customer who have submitted an offer for the purchase of such item." at Col 1 line 10-16.

Secondly, we have to ask what is the particular problem being solved here. The word "particular" is the key. The applicant's particular problem is to manage the freight fees by the cargo service provider (Specification Page 2 at line 10-11) and Walker's 127 is for passengers to lock in the low cost of ticket, to sell tickets. Nowhere in Walker '127 is it shown that such a problem faced by the applicant is present nor is Walker '127 working on such a problem as faced one skilled in the art of cargo management. As the Federal Circuit pointed out in Re Zurko, " to say that the missing step comes from the nature of the problem to be solved begs the question because the Board has failed to show that this problem had been previously identified anywhere in the prior art ." In re Zurko, 111 F.3d 887, 42 USPQ 2d 1476, 1479 (Fed Cir), reh'g en banc granted, 116 F.3d 874 (Fed Cir 1997) ("Zurko I") (citing In re Spinnable, 405 F.2d 578, 585, 160 USPQ 237, 243

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(CCPA 1969)(“[A] patentable invention may lie in the discovery of the source of a problem even though the remedy may be obvious once the source of the problem is identified.”)).

The most appropriate question to ask is whether one skilled in the art by reading Walker ‘127; is capable of seeing the problem of managing freight fees faced by the applicant ? If the answer is no then it is clear that the examiner has defined the problem in terms of its solution. In short, the examiner saw the solution to be parallel and made that as a basis to find similar art to show analogous. Orthopedic Equip. Co. v. United States, 702 F.2d 1005, 1012, 217 USPQ 193, 199 (Fed. Cir. 1983) (“It is wrong to use the patent in suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve [a desired result].”).

In the case of Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc., 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996), citing In re Rinehart, 531 F.2d 1048, 1054, 189 USPQ 143, 149 (CCPA 1976) the issue of considering the problem to be solved in a determination of obviousness was discussed. In this case, the reason to combine arose from the very nature of the subject matter involved, the size of the card intended to be enclosed. The suggestion or motivation to combine these features of the prior art was thus evident from the very size of the card itself. Card holders larger than the card had already been designed. On the other hand, a card holder no larger than necessary clearly was desirable in order to enable the card holders to fit in a set box. It would also avoid having the cards bang around in a holder larger than needed.

We distinguish from Pro-Mold. As said, the prior arts in the said case show all the features and arose from the very nature of the subject matter, the size of the card to be enclosed. In this application, the very nature of the subject matter being the cargo option is not self evident from managing cargo space fees. We start from the self-evident proposition that mankind, in particular, inventors, strive to improve that which already exists. However, no current solution has been evidenced to date by the examiner whereby one skilled in the art can improve on to reveal the subject matter in our claimed invention. In Pro-Mold, larger card holders have been designed enabling said design to reveal the nature of the problem itself. In Walker’s 127, the closest prior art evidenced airline tickets option but the teaching does not reveal the nature of this applicant’s problem whereby one skilled in the art will see the desirability to modify it to cargo option nor does cargo option serves any benefit for selling airline tickets. Lastly both prior arts also do not show all the features particular, ie cargo system.

“Anticipating option to purchase an airline ticket in Walker ‘127 ”

Since option is commonly identifiable, this means the only difference lies between airline ticket, cargo system, airline system and cargo. Thus, the critical question here is whether an airline ticket can rely on minor or missing elements so recognized in the art to inherently reach our subject matter “cargo”. The qualification to this factual finding is

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that the missing elements or functions must necessarily result from the prior art reference and are well-known. As discussed above airline tickets are designed to seat humans and even the air stewards are employed to serve humans with no apparent regards to cargo. Therefore, the question here is that, when can we consider a human to possess characteristics becoming a cargo as the missing element? We could not find any facts in Walker '127A to show this inherency nor can we find any person skilled in the art of airline ticketing to testify to this. Similarly, is it inherent that an airline system possess features found in a cargo system? Even if it may have some similar features such as dates, route, CPU, RAM or ROM, ticket price and type of carriers, taken together would one skilled in the art see an airline system to inherently having features becoming a cargo system. Without such convincing reasons from the letter, we can only submit that it cannot and therefore fails the prima facie anticipation test of each and all elements.

The Federal Circuit has stated: An anticipating reference must describe the patented subject matter with sufficient clarity and detail to establish that the subject matter existed and that its existence was recognized by persons of ordinary skill in the field of the invention. (ATD Corp V Lydall Inc, 159 F.3d 534, 48 USPQ 2d 1321, 1328 (Fed Cir 1998) (citing In re Spada, 911 F.2d 705, 15 USPQ 2d 1655, 1657 (Fed Cir 1990); Diversitech Corp V Century Steps, Inc., 850 F.2d 675, 678, 7 USPQ 2d 1315, 1317 (Fed Cir 1988)). Our conclusion is that the prior art has not satisfied this "clarity and detail" standard explicitly and inherently as seen by those skilled in the art of airline ticketing.

Therefore in sum, we still submit given our reasoning above, the prior art Walker '127 is not analogous nor does it anticipates our claimed invention subject matter of cargo options.

35 USC 112 First Para issues

In rejecting the claims 29-54, the examiner has cited " The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the invention was filed had possession of the claimed invention.", in short this is a written description failure or representing new matter in claims. In Staechelin V Secher, the Board added that "[s]atisfaction of the 'written description' requirement does not require in haec verba antecedence in the originally filed application." (Staehelin V Secher, 24 USPQ 2d 1513 (B.P.A.I 1992). See Similarly Ex Parte Parks, 30 USPQ 2d 1234 (BPAI 1994) Also Claims as filed in the original specification are part of the disclosure. (In re Benno, 768 F.2d 1340, 226 USPQ 683, 686-87 (Fed. Cir. 1985). Furthermore, it has been held that specification and claims may not be rejected for lack of written description under Section 112, first paragraph, when details in the claims that are not described in the specification are within the level of ordinary skill in the art. (See In re Skrivan, 427 F.2d 801, 166

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USPQ 85, 88 (CCPA 1970). We applied these three cases above for our analysis below and are quoted thereof.

We have summarized our rebuttal in the following table and detail analysis is found below under each respective claims.

112 Paral Issues	Summary Evidence
Update	This is well known in the art of database SQL and one skilled in the art
Delete	Well known in database SQL
insert	Well known in database SQL
select	Well known in database SQL
match	Found at Page 7 of our specification line 5 where we wrote " in line with database concept, it can also do search, match, rank as well as any secondary functions within its program.
identify	Well known in database SQL
filter	Well known in database SQL
Pricing	Found in page 1 under Title of Invention " Method, apparatus and program for PRICING...
Final Price	Well known in the art of option to be the exercise price. Else we can use particular price or remaining payment both found in our specification.
Terms of contracts	" terms of the option " is found at Claim 3, line 17 and the word "terms" at Claim 1, line 6. One skilled in the art of option would recognize that an option is basically a contract and all contracts have terms.
Fee	Option price and option fee would convey the same to one skilled in the art.
Fixed route	We also found "fixed route" in Claim 4 to support we have possession of this element as at filing date.
Option price for air-cargo example	Our original claim at filing date supports "option price = $LC \cdot D \cdot L \cdot R \cdot V \cdot W \cdot T \cdot Q \cdot A \cdot CO$ " as in Claim 20. We have request our specification to be amended as above.
Cargo space	Recited in page 17 at line 5 of the specification
Cargo space risk	This would convey to one skill in cargo that by managing the fee / price one is managing the risk of such space given the relationship between price and cargo space. The cheaper the price, the more you sell etc.
Base price	in Claim 21 here " a step to receive a base price for the option on line ". The actual calculation of the base price is not found but that is within the one skilled in the art. There are many ways to calculate a base price one example is seen in Walker '127, which uses a fixed percentage. In our case, we use the current price less the particular price or remaining payment and adding the cost of funds which is well known in the art of finance. However, we have decided that we do not want to restrict ourselves to just one formula and hence have deleted the actual formula in view that in the future other more sophisticated formulae be developed which might supersedes ours. But we do not agree that the concept of base price calculation is beyond that of one skilled in the art and this requires us to detail each and every one in the specification in order to satisfy the 112 Para 1 rejection..
Calculating standard deviation of freight prices	Claim 4 page 24, line 9-10. And in Claim 21 " a step to calculate the volatility of the cargo prices...". Standard deviation calculation would be known to most artisans in the art of statistics.

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Offering it	The basis of the invention is to offer or ask for the price which leads to the contract if acceptable. The word "offer" is also found at page 13, line 14 at specification.
Determining a fee for an option contract	We can substitute fee for "price" for an option contract. The formula is shown above as option price and one skilled in the art would recognize that an option is basically a contract and the fee or price is consideration to enter into the contract. Therefore, determining a fee or calculating an option price would convey the same to one skilled in the art.
Option fee	We submit that a fee has the same context and meaning as price as seen by one skilled in the art
Fee schedule	We have deleted this.

Analysis of USC 112 Para 1 in detail.

Claim 29.

In letter, it is said that the specification does have the " database update, delete, insert, select, match, identify, filter functionalities ". We beg to disagree. The word " match " is found at page 7 of our specification where it is said " In line with the database concept, it can also do search, match, rank as well as any secondary functions within its program." at line 5.

Furthermore the act of "storing all inputted data and maintain a database for all actions taken during its process and those instructed by the users, for example purchasing the option or selling it later" at line 2 to line 4 at page 7 would necessarily convey to one skilled in the database that this satisfied the functions of " update, delete, insert, select, identify, filter " functionalities. In theory these would come under all actions taken during its process.

The word " search" would necessarily convey " identify and filter " and is common in database application and one skilled in the art would recognize this. The act of searching would require one to identify what to search and to run a program to filter the subject. For example the partial code to search in SQL is " SELECT [field name] from TABLE where"

We have substitute "Final Price" (where applicable) to "Particular Price" which is found at Specification Page 26, line 13. The exact line is reproduced below " ...option with a fixed expiration date at a particular price, alternative pricing..." but we also submit final price to be known to one ordinary skilled in the art to mean the balance payment or particular price.

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The word “pricing” is found at page 1 under Title of Invention “Method, apparatus and program for pricing, transferring...”

The word “term of contracts” or meaning thereof can be found at Page 22, line 15 and reproduced below

“...default all option contract should be standardised within the meaning that they...”

And “terms of the option” is found at Claim 3, line 17 and the word “terms” at Claim 1, line 6. The fact that an option once paid constitute a contract with terms binding two parties is well known in the art else its just an option on offer or bid.

The word “planning” is deleted.

Furthermore, it has been held that specification and claims may not be rejected for lack of written description under Section 112, first paragraph, when details in the claims that are not described in the specification are within the level of ordinary skill in the art. (See In re Skrivan, 427 F.2d 801, 166 USPQ 85, 88 (CCPA 1970). We submit that words “final price or exercise price or terms of contract, pricing” are within the level of ordinary skilled in the art.

Claim 32.

In letter, it is said that the specification does not discuss a cargo option fee contract satisfying a fixed route and a final price and offering it.

We have requested for an amendment in the specification to include ‘fee’ as reasoned in Claim 37 below.

Subject to the examiner’s approval, we submit, the word option “fee” is consider the same as option “price” as seen by one skilled in the art and hence fee is understood to convey the same. It is common to interchange the words as per its dictionary meaning since the word fee is paid for a given price. The CCPA has described the written description requirements as follows: “It is not necessary that the application describe the claim limitations exactly,...but only so clearly that persons of ordinary skill in the art will recognize from the disclosure that appellants invented processes including those limitations.” (In re Wertheim, 191 USPQ at 96 (citing In re Smythe, 480 F.2d 1376, 1383, 178 USPQ 279,284 (CCPA 1973)). We submit that the word fee and price both denote a number measured in economic terms to show value. Furthermore, para 1 of USC 112 allows for “or which it is most nearly connected” to be used.

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“Route Criteria”

We find route criteria in the specification at page 13, line 23 “the date of departure and route criteria “ which means a route that must be fixed. At page 14, line 2, “The route criteria refers to the actual route the customer is seeking to reach say from Sydney to Singapore, non-stop, plane type, size and weight, time of arrival, urgency, once a day etc.” As one is aware routes starting from one destination must end at another destination and therefore is fixed. Carriers often offer fixed routes and one must select the pair departure and arrival points. There is no possibility of mix and match hence we believe the word “ fixed route “ merely qualifies route. We also found “fixed route” in Claim 4 to support we have possession of this element as at filing date.

There is no ‘final price’ but it is well known in the art of option, that the exercise price is the final price to pay upon exercise. We will replace final price with ‘previously negotiated price’ (specification at page 25 line 7) or ‘remaining payment’ (Our specification at page 2 line 13) or ‘particular price ‘ (specification at page 26 line 13) where appropriate all referring to payment upon settlement or exercised.

It has been held that specification and claims may not be rejected for lack of written description under Section 112, first paragraph, when details in the claims that are not described in the specification are within the level of ordinary skill in the art. (See In re Skrivan, 427 F.2d 801, 166 USPQ 85, 88 (CCPA 1970).

Claim 33.

The words “managing cargo space risk” would have the same meaning of managing cargo facility risk as technically, we cannot manage cargo per say since a carrier does not sell cargo as a service but cargo space and our specification’s subject matter is about cargo for the customer which in effect occupied the cargo space offered by the carrier. We believe our overall disclosure made it clear to one in the art of cargo services that we mean ‘cargo space’ as the service being offered by way of the underlying option. Furthermore, it has been held that specification and claims may not be rejected for lack of written description under Section 112, first paragraph, when details in the claims that are not described in the specification are within the level of ordinary skill in the art. (See In re Skrivan, 427 F.2d 801, 166 USPQ 85, 88 (CCPA 1970)

Moreover, the word ‘cargo space’ has been recited in page 17 at line 5 of the specification and quoted here “A factor related to the expected cargo space on the subject route.” To claim ‘cargo risk’ seems to confer a different meaning such as risk of damage to the cargo which is not what is being suggested in the specification. Furthermore at page 9 of our specification at line 13, “space” appears.

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It has been held that specification and claims may not be rejected for lack of written description under Section 112, first paragraph, when details in the claims that are not described in the specification are within the level of ordinary skill in the art. (See In re Skrivan, 427 F.2d 801, 166 USPQ 85, 88 (CCPA 1970).

Claim 37.

It would be difficult to write the same words “ option price for air-cargo example “ in the claims given that the specification actually details an example for air cargo option for the formula. One skilled in the art would be able to recognize that the words are mean to illustrate the air cargo example formula and its not meant to be claimed exactly. The CCPA has described the written description requirements as follows: “ It is not necessary that the application describe the claim limitations exactly,...but only so clearly that persons of ordinary skill in the art will recognize from the disclosure that appellants invented processes including those limitations. “ (In re Wertheim, 191 USPQ at 96 (citing In re Smythe, 480 F.2d 1376, 1383, 178 USPQ 279, 284 (CCPA 1973)). At the time of writing the claim, the one skilled in the art would recognize the formula as an example for air cargo, hence the word example could be deleted and it is for cargo option as the entire disclosure pertains to this. As mentioned in line 22 of page 20, “ The above is only a example for demonstration purposely. “ Furthermore, it has been held that specification and claims may not be rejected for lack of written description under Section 112, first paragraph, when details in the claims that are not described in the specification are within the level of ordinary skill in the art. (See In re Skrivan, 427 F.2d 801, 166 USPQ 85,88 (CCPA 1970)

Alternatively, we ask the examiner’s permission to make the following amendments for clarity in the body of the specification so that it mirrors each other in claiming the exact same invention (even though this is not an admission), please refer to Markup Version in Appendix 2 for the result of the amendments for page 20.

Amendments Instructions for Page 20:

At line 14, please insert the words “ or fee “ and “ cargo” whereby whole sentence will be read as

“ Using these variables, a suitable algorithm for calculating an appropriate cargo option price or fee is as follows: “

At line 16, please delete the words “for AIR CARGO example ” and insert the word “Cargo” whereby the resultant sentence is shown as below:

Cargo option price = $LC \cdot D \cdot L \cdot C \cdot R \cdot V \cdot W \cdot T \cdot Q \cdot A \cdot CO$

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There is no new matter being made or introduced here, we have only rearrange the words to make it clearly.

Furthermore, our original claim at filing date supports "option price = $LC*D*L*C*R*V*W*T*Q*A*CO$ " as in Claim 20.

" It is well settled that the specification of an application may be corrected or implemented by matter contained in an original claim, and that such matter may form as much a part of the disclosure of an application as if it had appeared in the body of the specification." (Bocciarelli V Huffman, 232 F.2d 647, 109 USPQ 285 (CCPA 1956)

Claim 38.

Cargo space risk was discussed in Claim 33 above. Price risk can be found at specification page 2 line 1 and is reproduced here, "Freight fees, particularly in air-cargo are constantly changing as well as rising, with availability subject to present economic situation. Unfortunately at this time, there is neither system nor device for managing the risk of these fees." Fees here is in reference to freight fees which is the price. Cargo and freight is used interchangeable in the whole disclosure and one skilled in the art would recognize them as the same.

As for option fee, we found at specification page 2 line 28 and is reproduced here, "Moreover no system has been developed for determining prices for options for freight facilities and keeping track of the sale and exercise of these options.", the word "prices for options" would be similar to option fee, otherwise we are comfortable with substituting this to option price which is found in the specification.

It is well known that cargo space risk is a function of price and in our formula we use a standard deviation factor based on the price of cargo space. Standard deviation is the equivalent of the layman term of "risk" and since the option fee is calculated by incorporating the standard deviation factor, hence price risk as an option fee would make sense to one ordinarily skilled.

It has been held that specification and claims may not be rejected for lack of written description under Section 112, first paragraph, when details in the claims that are not described in the specification are within the level of ordinary skill in the art. (See In re Skrivan, 427 F.2d 801, 166 USPQ 85,88 (CCPA 1970)

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Claim 39.

As for option fee see Claim 38 above. We agreed there is no schedule fee so this will be deleted.

Claim 47.

Base price was discussed in Claim 21 and reproduced here “ a step to receive a base price for the option on line “, although said claim is now cancelled but at the time of filing, we have possession of this element..

However “calculating standard deviation of freight prices” is found at Claim 4 page 24, line 9-10. And in Claim 21 “ a step to calculate the volatility of the cargo prices...” Note claim 4 & 24 were cancelled previously but at the time of filing, we have possession of this element.

“ It is well settled that the specification of an application may be corrected or implemented by matter contained in an original claim, and that such matter may form as much a part of the disclosure of an application as if it had appeared in the body of the specification.” (Bocciarelli V Huffman, 232 F.2d 647, 109 USPQ 285 (CCPA 1956)

Furthermore, it has been held that specification and claims may not be rejected for lack of written description under Section 112, first paragraph, when details in the claims that are not described in the specification are within the level of ordinary skill in the art. (See In re Skrivan, 427 F.2d 801, 166 USPQ 85,88 (CCPA 1970). We strongly believe that one skilled in the art would know how to calculate standard deviation and understand the relationship between volatility and standard deviation.

Claim 49.

Option fee was discussed in claim 38 above.

We found the word ‘pricing’ at “Method, apparatus and program for pricing, transferring, buying, selling and exercising of freight cargo options on the World Wide Web. “ at page 1 title of invention and in Technical Field.

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Claim 52.

We are unsure about the issue raised here “ determining a fee for an option contract “ whether the objection is for the whole words or determining a fee is not found or option contract is not found. However, we found this “A method of determining a price of the cargo option” in Claim 11 which is equivalent to our claim. We submit that the broader language should be permissible because the description of ‘determining a fee for an option contract’ would immediately convey to one skilled in the art that we are in possession of the elements as at filing date. We do not have any problem to rewrite this exactly word by word to show we have possession of this element at the date of filing.

The word ‘ contract ‘ has also appeared in Page 2 line 14, “..to exercise the option. Options contract for freight cargo has to be standardised in..”

In sum, we are of the opinion that exact of description is not necessary as long as they refer to the same as seen by one skilled in the art. See, e.g., Crown Operations Int’l, Ltd. v. Solutia Inc., 289 F.3d 1367, 1376, 62 USPQ2d 1917, 1922 (Fed. Cir. 2002) (“[T]he disclosure as originally filed does not have to provide *in haec verba* support for the claimed subject matter at issue.”). Identity of that which is described, however, is necessary: “What is claimed by the patent application must be the same as what is disclosed in the specification” Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. ___, 122 S. Ct. 1831, 1840 (2002); accord Lockwood v. American Airlines, Inc., 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966 (Fed. Cir. 1997).

Furthermore as known in the art, claims as part of the specification having the elements at the time of filing is evidence of possession of said elements and hence not new matter. “ It is well settled that the specification of an application may be corrected or implemented by matter contained in an original claim, and that such matter may form as much a part of the disclosure of an application as if it had appeared in the body of the specification.” (Bocciarelli V Huffman, 232 F.2d 647, 109 USPQ 285 (CCPA 1956)

Discussion on Claims.

Discussion and Background to 6085169. Herein ‘169.

This is a newly introduced prior art previously not cited. Patent ‘169 discloses a conditional purchase offer management system and cited airline passengers as one of its many utility. According to the disclosure, the CPO is initiated by a customer such as airline passengers and is then evaluated or compared against a number of CPO rules defined by the seller such as airlines, to determine acceptance of the CPO. The words “

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evaluated and compared “ (herein task) are significant since it holds that the CPO Server 200 is doing the task and not the airline Secure Server. This is a significant difference between our Claimed Invention where the cargo system is doing the task. Because the task is done at the CPO Server, there is no requirement for Airline Secure Server to respond unlike our Cargo system where it responds with cargo information. This is material but not unexpected as mentioned CPO Server 200 actually is doing the task of evaluating. A final difference is that all CPO rules are stored in Secure Server and are not released. Since CPO Server 200 evaluates these data to make a determination on behalf of the airlines, then it cannot reach our claimed cargo system where data are evaluated, processed into factors before returning to central controller by said cargo system if acceptable. In short an airline system in ‘169 does not anticipate as it lacks, means to respond, means to evaluate, means to calculate. And even if it has all the means typically found in any computer system, it is still not capable of responding cargo information as described in ‘169.

An option is not a binding offer however a CPO such as disclosure in ‘169 is binding.

A CPO is defined as a binding offer containing one or more conditions submitted by a customer-at a defined price. Once accepted by the seller, the CPO binds the buyer to purchase the ticket with attached CPO rules. CPO rules are set by seller and are stored in a secured server upon being serviced by a CPO submitted by a customer. Customers may not query a second time upon rejection. (Abstract ‘169) We submit that an option fee is not inherently the same as the customer providing a conditional purchase price in a CPO since the pre-defined fee is submitted by user and not calculated by CPO Server. Furthermore, even though in an option enquiry there is a final price or remaining price submitted as part of the determination by the cargo system and later in affecting the pricing process, we submit such a price is not an indication of an offer as in a CPO. One has to recognize that an option is none bidding as the word “option” implies a right but not an obligation. These functional limitations are important as they form the substance which distinguish our claims from Walker ‘169.

Discussion and Background to 5797127A. Herein ‘127.

This prior art was first introduced in our first office action where it was used to reject all our claims 1-28 for anticipating our claimed invention. It has been re-introduced in this final rejection letter either as a single 102(e) or in combination with ‘169. The prior art describes a method for pricing an option to purchase an airline ticket.

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Response to Rejection of Claims in detail.

Claim 29

Claim 29 has been rejected for obviousness under 35 USC 103(a) as being unpatentable over Walker '127A in view to Powers (5956691 A) and Lei et al (6487552 A). This rejection is respectfully traversed.

We submit, Walker ' 127A does not teach an apparatus for cargo service provider in an exchange environment to price cargo option which may be sold, bought and settled. There is also no evidence of any cargo system linked to said missing exchange. The evidence shown by the examiner (Abstract col 1, lines 40-67, col 2, lines1-9, col 4, lines 1-5, 53-60) discloses a financial option such as for stocks and an airline ticket option system. While financial exchanges is well known but said exchanges are not capable of pricing options and the pricing of financial option is done by the seller or buyer at the time of request. And even if there are pricing means, there is no pricing means known in said exchange to price cargo options. In Walker, there is no teaching of the structure limitation for an exchange. There is no evidence to suggest that an airline reservation system can be an exchange nor is an airline reservation system capable of serving the interest of cargo service provider. It is well known that cargo service providers do not sell seats.

Given that there are no explicit evidence to suggest all our elements or to modify to reveal our claimed invention, we assume here that obviousness is based on Walker ' 127 only. Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference. See B.F. Goodrich Co. v. Aircraft Breaking Sys. Corp., 72 F.3d 1577, 1582, 37 USPQ2d 1314, 1318 (Fed. Cir. 1996).

There is no requirement to support an obviousness rejection that a prior art reference explicitly contain all the necessary features of the claimed invention. Rather the inherent teachings of a prior art can be used to support an obviousness rejection. (In re Grasselli, 713 F.2d 731, 739, 218 USPQ 769, 775 (Fed Cir 1983).

Since the letter did not provide any motivation or teaching from Walker ' 127 to modify, we can only assume that the examiner relied on inherency to show this obviousness based on implicit elements that must flow from Walker' 127. We submit that such reliance is misdirected by assuming the missing features are necessarily present, in particular, a cargo option, a cargo system and an exchange element. Walker '127 did not teach of selling or buying existing option contracts and even if it is taught in a financial exchange to sell secondary option contracts, it is not known to sell or buy secondary cargo options.

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There is no reasonable technical teaching to conclude that a financial exchange must have features designed supporting an unknown subject matter ie cargo option.

Furthermore, the letter provided no reasoning to support any inherency. In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original).

Given the reliance on inherency is misdirected as not all features are evidently necessary present and without reasoning to support, we respectfully submit that obviousness rejection relying on Walker '127 be withdrawn. As stated the missing features are cargo system, an exchange capable of pricing cargo option and entering an offer for sale or purchase of a cargo option,

In rejecting the claim, the letter also states that " Thus, it would have been within the level of ordinary skill in the art to modify the method of Walker et al by adopting the teachings of Powers and Lei et al to obtain an effective way of displaying and manipulating data. " at page 13 of letter.

It is well established that the standard of obviousness is not whether one skilled in the art is capable to arrive at the claimed invention. *Ex-parte Levengood*, 28 USPQ 2d 1300 (Bd Pat App & Inter. 1993) Rather the test is whether there is any teaching to combine the cited references embodying their features. In short there must be suggestion found in the prior arts for one ordinarily skilled to combine its features with the features of the other reference failing which impermissible hindsight has been used. No teaching has been evidenced in the letter.

Also See *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed.Cir.1983) ("To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge, is to fall victim to the insidious effect of a hindsight syndrome wherein that which only the inventor taught is used against its teacher."). Skill in the art does not act as a bridge over gaps in substantive presentation of an obviousness case, but instead supplies the primary guarantee of objectivity in the process. See *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 718, 21 USPQ2d 1053, 1057 (Fed.Cir.1991).

Furthermore, even if there are teachings, the references cited still fail to reach " to offer priced option contracts and cargo service request which are posted for sale and bids are placed to attract buyers/sellers for a predetermined period. " Walker' 127A made no mentioned of priced option being offered to other users (plural) or having the cargo service request for cargo options and neither cited references in Lei and Powers show display "for predetermined period". Priced cargo option is referenced to cargo option that are pre-owned.

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In sum, Walker '127's central controller is not inherently an exchange where buyers and sellers can post offers and bids explicitly and inherently. Another probably reason why Walker's does not necessarily shows an exchange is simply the issue of Business to Consumer business model in airline tickets. This is in contrast to Cargo where the model is Business to Business, ie Cargo Carriers to Cargo Forwarders. It is rare that a consumer gets to contract cargo space with the carriers directly unless they are preferred customers.

Even if it may be well know that Lei and Powers methods are within the skill to modify with Walker '127, it is not well known to provide a system where cargo option can be created in an exchange by combining said methods as claimed here. Given that no suggestions were cited in Walker '127 or in combination with Lei and Powers to show why one skilled in the art would modify an apparatus for purchasing option for airline ticket to arrive at our cargo option exchange as claimed as a whole and our reasons above, we respectfully ask this claim in its entirety to be allowed. As mentioned, the skilled factor is discounted for it is not proper. In theory all skilled in the art have the capability once they are taught. The question in obviousness rejection is what the benefits or motivations are and whereby must consider the whole claim.

Our proposed amendments include conforming to any 112 Para 1 requirements.

Claim 30 and 31:

Both claims rejected for obviousness under 35 USC 103(a) as being unpatentable over Walker '127A.

The rejections are respectfully traversed. Claim 30, 31 depend from Claim 29 and therefore include all of the limitation of claim 29. As discussed above, it would not have been obvious for one viewing Walker '127A in light of what is known in the art to provide a pricing system for cargo options within an exchange environment as in the claimed invention. Walker shows no teachings to sell or offer airline ticket options in an electronic exchange environment nor is a cargo option exchange obvious reading from Walker '127 which further lacks a cargo system. Walker's teaching refers to a primary market to originate airline ticket options by an airline and settlement as such.

Secondly, being an obviousness rejection, motivation or teaching is required to show why one skilled in the art would be motivated to modify Walker '127 to reach our claimed invention. There is no requirement to support an obviousness rejection that a prior art reference explicitly contain all the necessary features of the claimed invention. Rather the inherent teaching of a prior art can be used to support an obviousness rejection (In re Grasselli, 713 F.2d 731, 739, 218 USPQ 769, 775 (Fed Cir 1983)).

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We submit that for claim 30, Walker '127 does not have the feature where the user sell the cargo option or offer for sale in an exchange environment. In our claimed invention, the user can offer to sale the cargo option to anyone including to the cargo service provider particularly when the provider is looking for a put option. This feature is also not inherent in Walker '127 because it primarily disclosed a primary market where options are issued to the user. Although Walker '127 disclosed a third party issuing a ticket option (Col 8 line 40-45), said disclosure however does not necessarily show the element of an exchange nor is "issuing" necessarily means selling an existing option. Originating or pricing an option does not inherently means able to resell it again given no disclosure on an infrastructure capable of receiving such an offer or bid. Furthermore without teaching, obviousness cannot be based on the unknown.

To rely on inherency to establish the missing features, case law in *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) requires the examiner to provide a basis in fact and/or technical to support this. None was demonstrated. Inherency cannot be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. (In re Oelrich, 666 F.2d 578,581,212 USPQ 323,326 (CCPA 1981) (quoting *Hansgirk V Kemmer*, 102 F.2d 212, 214, 40 USPQ 665,667 (CCPA 1939)) (emphasis added). Thus, inherency permits in limited circumstances, an invention to be anticipated by prior art that is lacking minor but well known features or functions as seen by one skilled in the art.

Even if it is inherent, Walker '127 still does not show transactions for cargo option. And while an exchange is well known in the art of financial option it does not inherently follows that one must exist for cargo option when the subject matter is not known except for our application.

Our amendment for this claim includes moving the elements of offer to sell, offer to buy, search other options to claim 29 and adding a reference to "posted options". The amendment reflects deleting repetitive matters found in claim 29 while the added "posted options" makes it clear that the user is purchasing or selling secondary options since they are already posted as in claim 29.

Similarly for claim 31, while the settlement or exercising of options is well known in the financial exchange and as disclosed by Walker '127, neither expressly or inherently teach one for cargo option and for cargo service. There are no reasons provided by the examiner to show that a cargo option would be obvious in view of an airline ticket option and there is no teaching in Walker of the problem faced by the applicant are found. In obviousness rejection there must be teaching together with missing features may be found inherently. In reliance on inherency, examiner need to show that cargo option must necessarily have features or functions or problems well known in ticket options to reveal our claimed subject matter as seen by one skilled in the art. No evidence have been alluded to date except for a statement as expressed in point 5 of rejection letter to which we have responded that 'parallel' is too broad and over simplified the technical know-

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how to link purchasing and dealings in cargo space. In re Gartside, 203 F.3d 1305, 53 USPQ2d 1769 (Fed. Cir. 2000), held that substantial evidence is the correct APA standard of review for Board factual findings. Substantial evidence is "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." Consol. Edison Co. v. NLRB, 305 U.S. 197, 229 (1938); see also Zurko III, 527 U.S. at 162, 50 USPQ2d at 1772-75.

For an obviousness rejection to sustain, the test is for one skilled in the art of ticket option able to read our claimed invention from Walker '127 without having any access to our application. The first step is to identify the particular problem faced by the applicant from the prior art. As the Federal Circuit pointed out in Re Zurko, "to say that the missing step comes from the nature of the problem to be solved begs the question because the Board has failed to show that this problem had been previously identified anywhere in the prior art." In re Zurko, 111 F.3d 887, 42 USPQ 2d 1476, 1479 (Fed Cir) ("Zurko I"). In the said case USPTO argued that the motivation to combine the references comes from the nature of the problem to be solved which appears to be parallel to the examiner's obviousness conclusion for this application.

Given that Walker' 127 did not disclose all necessarily features nor any technical teaching to support the theory of inherency were shown to reveal said missing features, and inclusion of limitations in Claim 29, applicant respectfully submits that claim 30, 31 are also patentable over Walker '127A in view of what is known in the art.

Claim 32.

This claim is rejected under 102 (e) Rejection as being anticipated by Walker et al (6085169)

We have amended this claim in a way to show the cargo service provider is requesting to purchase a cargo option and hence the arguments may be moot here. However, in particular the amendment distinguish both '127 and '169 because neither teaches where the service provider request an option or a CPO from the user. One distinguishing feature here which is retained is that the cargo option is offered to all users, said feature is not found in either '169 and '127. In '169 it distinctive taught secrecy in CPO in order to avoid the min price from being discovered and in '127 there is no teaching to provide for airlines to ask for bids from users.

Our disclosure shows this method as in specification page 24, first paragraph and hence do not raise any new issues or searches.

Since we have maintained "...where such offer(s) are open to all users for a predetermined period.", our rebuttal is as follows:

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The examiner provided Col 7 lines 55-67 of '169. There is nothing in said evidence that a cargo option price is outputted. We have amended this to "post" which is closely related.

Walker '169 teaches the CPO server provides responses in either acceptance, rejection or counter-offer to the CPO issuer. The counter-offer here is another price to be considered by issuer of CPO. Furthermore, since it is only a 1 in 3 chance that the response is a counter-offer, it cannot be said that at all times the response will be a price for a cargo option as in our claimed invention. Anticipation requires meeting all elements and not probabilities of meeting it.

There is nothing in '169 to suggest that the CPO is open to all. By the nature of the design of a CPO, as taught by Walker '169 said CPO is unique to said issuer and is secret to others. We therefore submit that this element has not been met explicitly or inherently. No evidence of inherently was adduced by examiner. Even if this is a functional limitation, it still has to be given weight in anticipation rejection.

We respectfully ask the examiner to allow and enter this claim.

Claim 33.

We have substantially amended this Claim to incorporate the allowable subject matter in Claim 37.

However since some of the elements are retained, we will response to them directly to counter the letter's stated rejection. Claim 33 is a 35 USC 102(e) rejection as being anticipated by Walker et al (5797127 A). (herein '127). However, an extra reference Walker '169 is used to show anticipation by the examiner. This is permissible only under 3 circumstances as stated in MPEP 2131.01 however only one of the circumstances can be used here and that is the reliance of inherency since the other two being enablement and describing the meaning of an element are not responsive to our case here. Since the examiner did not explicitly explained which case she relied on, we have the unstated assumption that the examiner had applied inherency here to reach our claim by using '169 to show the necessarily missing functionality or characteristics in '127.

The examiner explains that " Walker '127 does not explicitly disclose having service provider's cargo system provide cargo information upon determining suitability of such input by user as transmitted by central controller; having a CPU in service provider's cargo system; having a memory in cargo system means connected to said CPU, said memory means containing a program adapted to be executed by said CPU; having said CPU and memory in cargo system means to calculate the base price and determining

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suitability of said base price and the shipping information inputted by user and means to response cargo information to central controller if suitability is acceptable.” And that Walker ‘169 shows an airline system’s computer that accepts the CPO from the customer and the provider system has a CPU, memory and program to calculate price. “ The examiner also provided the reason as that it is within the level of ordinary skill in the art to modify the method of Walker ‘127 by adopting Walker ‘169 to reach our claimed invention, “ to obtain price and shipping information from the shipping system.” .

The examiner provided the following evidence to show our cargo system at Abstract, Col 7, lines 55-67, col 8 lines 15-50, col 9 lines 5-50 in Walker ‘169. We submit that the evidence does not inherently show a cargo system. Col 7, lines 55-67 shows CPO management system. Col 8 lines 15-50 shows that the CPO management system may optionally be linked to a central reservation system and Col 9 lines 5-50 shows details of the block diagram FIG 2 illustrating the CPO management server.

The examiner even stated its an airline system that accepts the CPO but provided no explanation as how such a system that accepts a CPO can inherently have features necessarily found in a cargo system. The facts in ‘169 as provided above actually shows a CPO management server 200 and not an airline system accepting CPO. The airline system is not capable of accepting CPO. Since it is not clear what “ provider’s computer system” is referring to as this term does not exist in the prior art, we presumed the examiner to mean the CPO management server. It would be helpful if the examiner use precise terms in the prior art so important features do not get mixed up.

The CPO management server actually service the airline system similar to our central controller. The CPO Server is linked to a Secure Server 300 which has stored CPO rules by airlines whereby these CPO rules are compared by the CPO Server upon receiving a CPO.

Walker ‘127 is missing a cargo system and all its inherent characteristics to anticipate. It appears that the examiner is trying to suggest that because the ‘provider’s computer’ has a CPU, memory and program to calculate price it must necessarily shows a cargo system because one skilled in the art is able to modify this. We submit that this proposition is problematic. Firstly, no technical facts were alluded to support such proposition to show that an airline system or the CPO server has characteristics becoming a cargo system. And secondly, by default if one skilled in the art has to modify this to reach our claimed element, it only means the element is currently not anticipated.

We submit the proper application of inherency as permitted by MPEP 2131.01 under “Extra Reference or Evidence Can Be Used To Show an Inherent Characteristic of the Thing Taught by the Primary Reference” is not properly applied because the ‘thing’ in the primary reference is missing. The thing being our cargo system which is not anticipated and therefore by applying the inherent characteristics of an airline system is erroneous since we did not claimed an airline system.

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Furthermore, the airline system or CPO server or whatever system in Walker '169 has to show determining shipping information and response with cargo information to fully anticipate. The fact that an airline system or CPO server having CPU and memory does not by itself become a cargo system. There must be evidence to support the examiner's implicit conclusion that "airline system" or "CPO Server" is equal to "cargo system" in order to rely on the inherent characteristics to reach our claimed invention.

"In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). The fact that one skilled in the art is capable of modifying is not substantial evidence necessarily flow from the reference. Furthermore, it can only confirm that because one skilled in the art has to modify first before reaching our claimed invention, anticipation has not been met in the first instance.

Given none of the above circumstances can be satisfied, we will further by applying 103(a). As stated by the Federal Circuit, "[I]f it is necessary to reach beyond the boundaries of a single reference to provide missing disclosure of the claimed invention, the proper ground is not Section 102 anticipation but Section 103 obviousness. (*Scripps Clinic & Research Found V Genentech Inc*, 927 F.2d 1565, 1577, 18 USPQ 2d 1001, 1010 (Fed Cir 1991))

The standard for obviousness requires teaching to combine respective features to reach our claim invention. In addition, there is a need for motivation before the date of our application such that our claimed subject matter as a whole would have been obvious to one skilled in the art. The examiner has remarked that "Thus, it would have been within the level of ordinary skill in the art to modify the method of Walker et al '127 by adapting the teachings of Walker et al (6085169) to obtain price and shipping information from the shipping system."

The issue here is not whether one skilled in the art would or capable of arriving at the claimed invention. That which is within the capabilities of one skilled in the art is not synonymous with obviousness. (see *Ex parte Levengood*, 28 USPQ 2d 1300 (Bd. Pat App & Inter 1993)) There must be teaching of the subject matter as a whole being pricing options for cargo services in the cited references or teaching to combine the features of both reference to reach our subject matter.

The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases the nature of the problem to be solved. See *Dembiczak*, 175 F.3d at 999, 50 USPQ2d at 1617. There is no teaching in either references for cargo options and even the nature of the problem of selling airline tickets does not lend itself to managing cargo space. There is also no suggestion in '127 to combine with CPO system as suggested by the examiner to reach a cargo option system. The Federal Circuit states that "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification

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obvious unless the prior art suggested the desirability of the modification." *In re Fritch*, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992)(citing *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984)).

We respectfully submit that this claim be allowed.

We have also added "having said CPU and memory means outputting the cargo option price for consideration by the user and update the database where said cargo option is available for predetermined period to other users if not selected by first user."

We submit that neither '127 nor '169 provides any teaching where cargo option is available for a predetermined period to other users if not selected by first user. This element is similarly found in claim 38 and our rebuttal as per Claim 38 is herein incorporated for this element.

Claim 34.

This claim has been rewritten as dependent on claim 33 and hence incorporates all the former's limitations. This rejection is respectfully traversed. However, as our amended claim reflects elements from Claim 35 in particular the user's shipping information, we will provide our rebuttal as below:

The letter remarked that these shipping elements as per Claim 35 are rejected under 102 (e) in view of Walker '127. (Abstract, col 3, lines 35-37, col 5, lines 41-67, col 6 lines 40-67, col 7, lines 1-26, 54-56) of Walker '127.

We submit specifically that the element "type of cargo" is not found in '127.

As discussed above, it would not have been anticipated for one viewing Walker '127A in light of what is known in the art to provide for a pricing system for a cargo option as in the claimed invention. As such, applicant respectfully submits that claim 34 are also patentable over Walker '169 in view of what is known in the art. Likewise, Walker '127A does not address the subject matter of the claimed invention 'cargo option'.

Claim 35.

Our amended claim here is a dependent on Claim 33 and hence incorporates all the said limitations which we have submitted to be not anticipate and not obvious.

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However, since this element also incorporates elements not deleted comprising cargo information, it would be necessary for us to respond to the examiner's rejection in regards thereof. The examiner has maintained a 102(e) rejection over these elements and provided (Abstract, col 3, lines 35-37, col 5, lines 41-67, col 6 lines 40-67, col 7, lines 1-26, 54-56) of Walker '127.

We submit that for an anticipation rejection to hold, all elements must be present explicitly or inherently. We submit that the following elements are missing from Walker '127, historical demand for this type of cargo space, type of cargo and furthermore all these information are provided by a cargo system, the structural limitation which is not anticipated. We therefore submit that since not all elements are present explicitly or inherently as found in Walker '127, we respectfully ask this rejection be withdrawn.

Claim 36

This dependent claim is cited as a 35 USC 103(a) rejection as being obvious to Walker et al (5797127A) (herein '127) in view to Walker et al (6085169). (herein '169)

We have amended this claim in totality and as the claim now depends on the limitations in Claim 33, we submit that this claim be allowed. On its own, it claims the element(s) of an electronic exchange for cargo options which is not obvious in neither Walker '127 or '169 and whereby the cargo is serviced by air, sea, rail or space carriers. Neither Walker '169 nor '127 discloses transporters in railway, space or sea.

Walker '127 teaches of stocks options and one skilled in the art of options would recognize an exchange. However, there is no known exchange for cargo option, the subject matter which is not obvious.

Claim 37

The elements of claim have been moved to Claim 33. However, we have written a replacement claim for user to settle said cargo option. This amended Claim is derived from Method Claim 45 being only different in the class and therefore the rebuttal presented in claim 45 is similarly incorporated.

In addition, as this claim is dependent on Claim 33's limitation, it would not have been anticipated for one viewing Walker '127A in light of what is known in the art to provide for a pricing system for a cargo option as in the claimed invention. As such, Applicant respectfully submits that claim 37 is also patentable over Walker '169 in view of what is

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known in the art. Likewise, Walker '127A does not address the subject matter of the claimed invention. We submit that this claim be allowed.

Claim 38

This independent claim is cited as a 35 USC 103(a) rejection as being obvious to Walker et al (5797127A) (herein '127) in view to Walker et al (6085169). (herein '169)

Th examiner remarked that Walker ' 127 and Walker '169 disclosed various airline reservation systems that post ticket prices and seating capacity. The examiner did not provide any specific evidence to support this contention "post ticket prices and seating capacity". (See page 15, first paragraph). If this is common knowledge or within the knowledge of the examiner, we respectfully ask the examiner to provide evidence under section 37 CFR 1.104.

While an airline reservation is well known in the art, we submit it is not well known to provide said system to post rejected ticket prices and seating capacity upon rejection by first user. This is not the same as advertising a published price or posting a special price as our claimed element specifically called for rejected prices.

It is also not well known to post such user's rejected cargo options prices as in our claimed invention. In short, the user has rejected the offer and hence the offer is now open to others having access. This is not obvious since there is no teaching in Walker '127 to offer rejected cargo options, wherein the element being claimed.

As for Walker '169 such practice contradict the very function of a CPO system. As mentioned a CPO system is where the buyer name their own prices subject to acceptance by the seller (airline company).

By posting airlines' rejected CPO will allow other potential CPO issuers or buyers to guess the underlying price flexibility by adjusting their CPO. For example, if CPO for US 30, US 34, US 29, US 10 are all rejected and posted, the next user will be in a better position to guess US 35 as the bottom price and therefore will not offer US 50 as compare to a situation where he does not know the rejected price. Assuming US 50 is a price he is willing to pay.

This is why rejected CPO should not be posted since it allows other airlines or customers to discover the underlying price flexibility of a particular airline. (See Col 3, lines 10-13) As we recalled these rules are highly confidential. Furthermore, as in Waker'169, an airline rejected CPO price cannot be offered to other users and even unlikely to be accepted, hence the benefit as asserted by the examiner is problematic.

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In rejecting, the examiner only showed that airline reservation system exists in the respective cited reference. However, there still must be teaching even if a single reference is used for obviousness rejection. The examiner has relied on the assumption that one skilled in the art would make the option contract available to other users because the reservation system is capable of posting such rejected contract despite having no teaching in the prior art. The reason provided "getting the benefit of selling the ticket and eliminating excess capacity" is also not found in either references. Walker '127 only teach that the user can revise the flight information. (Col 7, Line 35-40). Furthermore, there must be suggestion in Walker '127 to show the posting of prices and availability of seats by any system would result in getting the benefit of selling the ticket. However, the fact is there is no evidence to support the act of posting prices particularly rejected prices would yield such benefit in the art.

Even if a system is capable of posting something does not make it obvious that an airline reservation system may post prices that are rejected by other users without evidence in Walker' 127 that said rejected prices will necessarily sell to reduce excess capacity. As stated in *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986), there must be a reasonable expectation of success for obviousness to stand. It is said in *Re Dow Chem. Co* 837 F.2d 469, 473, 5 USPQ 2d 1529, 1531 (Fed Cir.1988) (both the suggestion and reasonable expectation of success must be found in the prior art and not in the applicant's disclosure). As discussed above, posting of rejected price in Walker '169 is not obvious since these are rejected by the airlines and are unlikely to be accepted the second or third time around. Thus, it would not have been obvious to one skilled in the art to include posting rejected cargo option prices by viewing an airline reservation system in light of what is known in the art.

Since there is no teaching of posting a rejected price in either references, we can only conclude that the benefit of "selling the ticket and eliminating excess capacity" is a hindsight analysis which is not permissible. In addition, both Walker '169 and Walker '127 are directed at different subject matter than the claimed invention. Walker '127 discloses an option to purchase an option for a ticket and not for cargo space. Similarly Walker '169 teaches a CPO for airline ticket. We also do not see any teaching to modify an airline reservation system to reach our claimed invention. In particular modifying the post functions by itself still fails to show why post rejected cargo option prices in the art that teaches airline ticket.

Secondly, the issue is not one of able to piece different features from different prior arts to arrive at the claimed invention but whether the teachings in Walker '127 in view of Walker '169 suggest to combine each other features in light to what is known in the art. The letter stated that Walker '169 shows, multiple carriers, pricing factors and departure dates for the CPO and hence within one skilled in the art to combine.

The letter states " Walker 127 do not explicitly disclosed querying a plurality of carrier cargo systems based on user's input " and provided the evidence that Walker '169

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disclosing multiple carriers in col 2, lines 35-65. The reason given is that it is within the level of ordinary skill in the art to modify to ensure the option contract reflects the flexibility in pricing based on numerous factors. The fact is that Walker '169 shows multiple airlines system but not cargo systems or carriers since the word carriers may include other type of non-aircraft carriers which is not taught by Walker '169.

The question is whether there is any teaching to combine said multi carriers feature with Walker '127 or vice-versa. One skilled in the art would not merely combine without any teaching and said teaching must come from the prior arts. The reason provided "flexibility in pricing based on numerous factors" is not found in either one of the prior references. In Walker '169, the need for multi-carriers is to check whether the CPO is acceptable across a range of CPO rules. While these rules contain price flexibility, they are not used to reflect any flexibility in pricing to the user but only in comparing the CPO. As known, CPO is accepted based on the price offered and even if the actual acceptable price is lower, the airline will not give the CPO issuer the lower price but only the price the CPO user submitted. In short the system in '169 as disclosed does not provide any price flexibility to CPO user and acts to preserve price rigidity at the price the customer has offered.

The standard of obviousness is not whether one skilled in the art is capable to reach the claimed invention. That which is within the capabilities of one skilled in the art is not synonymous with obviousness. (see *Exparte Levengood*, 28 USPQ 2d 1300 (Bd. Pat App & Inter 1993).

Furthermore, we see no relationship between carrier system to a cargo system and the examiner provided no explanation here to reached our claimed cargo system which is the subject matter being queried. This is a particularly important point as the examination seems to approach a carrier system to be equivalent to a cargo system despite the well known difference in the art. What are the technical factors such that the prior art element (carrier system) is a structural equivalent of the corresponding element (cargo system) disclosed in the specification ? (See *In re Bond*, 910 F.2d 831, 833, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990)).

The "multiple pricing factors" according to the examiner was disclosed in Col 3, lines 1-20 and therefore is within the level of ordinary skill in the art to modify Walker '127. Said evidence shows CPO rules. Based on Walker '169, we are not persuaded that pricing factors can inherently be embodied as CPO rules (Col 3, lines 1-20) since said rules are not used for calculating a price. As defined in Col 2, line 46, CPO rule is restriction utilized to render a decision and not as suggested multiple pricing factors to calculate a price.

Again, to combine another reference there must be teaching to show why Walker '127 would need such CPO rules and how these rules will benefit Walker '127 such that one skilled in the art would be motivated to modify Walker '127. The letter provided "

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reflects the flexibility in pricing based on numerous factors” as the reason. Price flexibility here as suggested is not supportive since CPO Server uses the CPO rules to decide on 3 outcomes that is accept, reject or counter which does not provide price flexibility.

The CPO rules are dynamically created by the RMS by evaluating current inventory, pricing and revenue information, as well as historical patterns and external events to forecast future travel, rather as in the claimed invention, in response to user's input. An example of these rules can be seen at Col 6 (lines 1-7) but these do not mirror or inherently teach the variables found in our cargo pricing information such as current cost of cargo services, check type of transporter available, availability of cargo space etc as per this claim. Therefore even if Walker '169 is adopted as suggested by the examiner, the CPO rules would not reach our cargo pricing factors as said rules are for deciding whether to accept, reject or counter a CPO offer.

Furthermore, there is a need to provide this pricing information to the central controller which is not known in Walker '169. CPO rules are stored in Secured Server and these rules are compared by CPO Management Server. There is no evidence that cargo pricing factors will play any role in Walker '127 since none of these factors will be able to support pricing a ticket option. This means one skilled in the art would need another reason found in the prior arts to adapt this for use in pricing cargo option. This is also not shown.

To combine or adopt the features found in two separate references requires some suggestion to combine each other features found in said references to reach our claimed invention. Our reading shows there is none to support such combination in light of two distinct instruments, one being an option for airline tickets and the other a CPO for airline tickets. And even if they are combinable, we submit they still do not reach our claimed invention. Obviousness rejection requires the claim to be considered as a whole.

Similarly, the standard of obviousness is not whether one skilled in the art is capable to reach the claimed invention. That which is within the capabilities of one skilled in the art is not synonymous with obviousness. (see *Exparte Levengood*, 28 USPQ 2d 1300 (Bd. Pat App & Inter 1993).

As for varying departure dates, there is no suggestion found in Col 7, lines 40-67 and the section only details how the CPO system works. There is no teaching that a CPO may include multiple dates in one offer. As stated, a CPO has these variables, the predefined price for the ticket and the itinerary parameters; such as the origin and destination cities; acceptable dates and time of departure and return; and whether connecting flights or stopovers are acceptable, preferred airlines, flight seat assignments, seat class, aircraft type, refund/change rules or maximum layover time. (Col 5, lines 34 to line 43). This element, however has been removed in our current amendment.

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Other than departure dates, this rejection seems to have miss mentioning calculating the price of the cargo option to secure underlying shipping service. As mentioned Walker ' 127 discloses option to purchase an airline ticket and not cargo shipping services. For an obviousness rejection to sustain, all elements in the claim must be considered including functional limitation. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Note that our functional limitations are embodied in a program in memory in the central controller which means they are embodied structural limitation and therefore must be considered.

In sum, most if not all inventions arise from a combination of old elements. See In re Rouffet, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457 (Fed. Cir. 1998). Thus, every element of a claimed invention may often be found in the prior art. See id. However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. See id. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. See In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d 1635, 1637 (Fed. Cir. 1998); In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984).

And even if there are suggestions to do so, there is nothing in both disclosures that remotely suggest by combining airline systems or reservation systems will show cargo option pricing system, the claimed subject matter as a whole. *In re Gulack*, 703 F.2d 1381, 1384 (Fed. Cir 1983) (the claim must be read as a whole and software limitations cannot be dissected from the prior art to support a rejection under 35 U.S.C. § 103).

Claim 39

This independent claim is cited as a 35 USC 102(e) rejection as being anticipated by Walker et al (6085169). (herein '169)

We have however make amendments to the claim to satisfy the allowable subject matter as per Claim 46, effectively inserting the element from Claim 46 while maintaining some of the existing elements. The reason for using this claim to be modified by Claim 46 is because of the numbering sequence.

As some of the elements are retained, our response to the letter's rejection is as follows:

Our claim 39 also includes " outputting the option fee to the user and update the database where said option contract is available for predetermined period to other users if not selected by first user. " which we have pointed out in Claim 38 as not obvious given there is no teaching found of such reservation system capable of posting rejected prices.

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The letter also did not word this element in rejecting claim 39, however the examiner in response to our inquiry stating that previously rejected element need not be rewritten again as practiced by USPTO. Given the last rejected exact element was a 103(a) rejection combining on the use of a reservation system to show outputting as per Claim 38, we submit that a 103(a) obviousness reason cannot be used in an anticipation rejection. Anticipation requires all elements to be present explicitly or inherently in a single reference or a secondary may only be used to show inherent characteristics. And the fact that one skilled has to modify only confirms that this element is not anticipated.

And even if a reservation system or airline system or CPO server is capable of outputting something, it is still not known to output a cargo option price that was previously rejected by first user. This is the element that is not anticipated.

We respectfully ask this rejection to be withdrawn as not having satisfied anticipating all the elements in the claim and the amendments included allowable element.

Claim 40.

This dependent claim is cited as a 35 USC 102(e) rejection as being anticipated by Walker et al (6085169). (herein '169). The amended claim now includes limitation found in Claim 39 and therefore is dependent on Claim 39. This rejection is respectfully traversed. However, given that we have maintained some of the elements in this claim, we will provide our rebuttal as below.

In particular, we have maintained the shipping information provided by user and a step for cargo system to receive said information. The letter maintains that Col 7, lines 55-67 anticipates our cargo shipping requirements. The evidence shows that a CPO with terms is received by the CPO management system and then said CPO is compared to CPO rules of each airlines. Since the letter provided no factual or technical to support inherency for CPO to show cargo shipping information must necessarily present, we respectfully disagree. Alternatively, we do not agree that our shipping information is a conditional offer as stated in the terms of CPO. Even if our shipping information includes a final price payable, it does not mean that the buyer must buy the services if the airline accepts the shipping information, the distinguishing feature in the CPO. We further submit that the shipping data is used so the cargo system can determine the pricing factors which are dynamically created in response to the user's shipping data. CPO rules are not created in response to CPO and neither are CPO rules transmitted to the central controller as per our resultant pricing factors. As this is an anticipation rejection, every word including functional limitations must be considered and we submit that a CPO does not inherently anticipates every word in our shipping data for example type of cargo (a passenger is not a cargo).

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We have amended by adding this to "a step querying at least one cargo system with said user's shipping information." Walker '169 still does not anticipate cargo system and there is nothing to show an airline system is inherently a cargo system.

The letter also remarked that '169 did not explicitly disclose calculating current standard of deviation and determine the number of service providers. However, in '127 there is standard deviation and thus it would have been within the level of ordinary skill in the art to modify the method of Walker '169.

We beg to disagree as even if it is within the skill of the PHOSITA, there is no requirement in calculating such standard deviation in '169 as CPO rules has no such requirement as disclosed in '169. We are unsure where the examiner source the reason for "to ensure appropriate variances are used in calculating the option fee" since '169 is not connected with option fee. Our conclusion is that while this element exist in '127 there is nothing to support that it must necessarily exist in '169 to support anticipation by inherency and hence impermissible hindsight has been used. The used of a second reference Walker '127 is only permissible to show the characteristic that must exist in a thing common to both references when said characteristic is missing in the primary reference and not to combine to show the missing element. For example, reference A shows element A and reference B shows element A with characteristics. And inherency is applicable only when reference B is used to show that element A must necessarily have the characteristics. It is clear that standard deviation is only present in Walker '127 and not in Walker '169. The examiner did not state what is the common element A in order to bring in the characteristics.

That is within the level of one ordinarily skilled is not at issue and does not flow from the missing characteristics. The reasoning is respectfully rejected. It is not why the PHOSITA with the skill would so modify but explaining why the calculating of standard deviation must inherently exist in Walker '169. There is no evidence in Walker '169 to show any requirement for this element. Walker '169 is not about option. Anticipation requires the element to exist inherently or explicitly and not by obviousness determination. And the fact that one skilled has to modify only confirms that this element is not anticipated.

Lastly, the letter remarked that it would be obvious to determine the number of service providers willing to provide the service using standard airline reservation services but gave no reason to support this obviousness. As stated, obviousness rejection requires teaching found in either references to combine each other features. Broad conclusory statements standing alone are not "evidence." See Dembiczak, 175 F.3d at 999, 50 USPQ2d at 1617. Furthermore this is a 102(e) rejection for anticipation and not an obviousness rejection. Hence an obviousness determination is also not appropriate.

In Walker '169, the system has no requirement for determining the number of service providers as the CPO system only response in accept, reject or counter. Determining how

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many airlines reservation system responded provide no extra value and we can only conclude hindsight analysis was applied.

We respectfully ask this rejection to be withdrawn as it is a dependent on Claim 39 and hence embodies all its limitations and for our reasons stated.

Claim 41

This dependent claim is cited as a 35 USC 103(a) rejection as being obvious to Walker et al (5797127 A). (herein '127 A or '127) and Walker et al (6085169 A) at page 13 of Letter. However, at page 15 of the letter, the examiner only detail rejection using one reference Walker '127. So we are proceeding in the assumption that this is a single reference obviousness rejection. Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference. See B.F. Goodrich Co. v. Aircraft Breaking Sys. Corp., 72 F.3d 1577, 1582, 37 USPQ2d 1314, 1318 (Fed. Cir. 1996). Given that in obviousness rejection, there is no requirement that a prior art reference must explicitly contain all the necessary features, rather the inherent teaching of the prior art can be used to support an obviousness rejection. In re Grasselli, 713 F.2d 731, 739, 218 USPQ 769, 775 (Fed Cir 1983)

As we have retained a portion of the elements here, our rebuttal as follows specifically for the rejected elements.

The examiner has rejected the elements being those as received from cargo system and provided Walker '127 as the evidence showing (Abstract, col 3, lines 35-37, col 5, lines 41-67, col 6, lines 40-67, col 7 lines 1-26,54-56). We respectfully disagree.

Walker '127 teach of departure location criteria, destination location criteria and travel criteria in Abstract, Col 3, lines 35-37 teach that option pricing depends on a number of factors not present in commodities, Col 5, lines 41-67 teach of departure criteria, destination criteria and travel criteria and went on to explain in detail what they consist of, Col 6 lines 40-67 shows the option price formula for ticket such as D a factor related to the number of days before trip, L is the expected load, C is the desirability of the customer, R is rigidity of the travel plans, V is the volatility factor and Col 7 lines 1-26, 54-56 shows an example calculation for a ticket option and the number of options sold may be used as a factor in determining future option prices.

As stated in re Royka, all elements must be present by one reference or in combining with another. The prior art reference (or references when combined) must teach or suggest all the claim limitations. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Given this obviousness rejection is based on Walker '127 then according, we

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respectfully submit that not all elements are present explicitly or inherently. In particular as identified here: historical demand for this type of cargo space, weather, type of cargo, type of transporter. Even if type of transporter and weather may be implicit, it still does not suggest cargo space and type of cargo because Walker ' 127 deals with passengers. The prior art has no implicit teaching to suggest that human passengers having properties becoming a cargo. And our cargo may not necessarily use an airline as stated in the specification, cargo option is designed for air, rail, space and sea carriers.

Obviousness in this instance requires some teaching even if it is only from one reference here. Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference. See B.F. Goodrich Co. v. Aircraft Breaking Sys. Corp., 72 F.3d 1577, 1582, 37 USPQ2d 1314, 1318 (Fed. Cir. 1996). The reference '127 teaches pricing an option for air line tickets. We could not find any teaching relating to cargo option, nor did the examiner advance any motivation to support such modification in rejecting this claim. While it is true that cargo being transported by aircraft may share some of the elements, this by itself does not make it obvious absent of some teaching of the subject matter as a whole to sustain a 103(a) rejection.

Accordingly, as this claim is also dependent on claim 39 and hence incorporates all its limitation, we respectfully ask the examiner to allow this claim.

Claim 42.

This dependent claim is cited as a 35 USC 102(e) rejection as being anticipated by Walker et al (6085169). (herein '169)

This claim has been maintained in its entirety. We have added the word cargo before the word option to show the reference to cargo. The letter offered Walker ' 169 Col 7, lines 45-67 as evidence for this 102(e) rejection. The evidence shows the process of offering a CPO by a customer and receiving a response which includes, accept, reject or counter. If the airlines accepts or customer accepts a counter, then a ticket is booked by CPO management system with the restrictions.

Anticipation requires all the elements in the claim to be identified. Any missing elements may be interpreted by one skilled in the art to necessarily present in the prior art in order to anticipate. We could not concur with the examiner's finding CPO must necessarily shows a cargo option contract. In Walker ' 169, the airlines accepts the CPO and the user booked a ticket based on the CPO. There is no teaching that says the user can sell a ticket to the airlines, only that said user can make an offer in CPO.

The above evidence does not anticipate a user has sold the cargo option.

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Secondly, there is no disclosure in '169 which anticipates posting details of the transaction accessible by all users. As mentioned, the act of posting any details of the transaction would not be compatible to the CPO system where the need to protect the minimum price is paramount so that other users will not gain any advantage. The CPO system depends on the issuer of said CPO is willing to pay without knowing what the actual minimum price is. In short, by not knowing the minimum price, the system takes advantage of imperfect information conditions in order to profit. If the successful price is posted then the next CPO issuer may post a lower price to guess the actual minimum price. Such knowledge will place the next user in an advantage which Walker '169 was not designed to provide.

Therefore, we are not persuaded that one skilled in the art of CPO would necessarily include our posting of results as a way to benefit the system. In fact, CPO prices once accepted is not known to be open to other users. Alternatively, an airline reservation system which is also found in '169 is also not known to post results of a ticket booked under CPO for the same reason that the underlying price sold and any restrictions under CPO must be kept secret.

This is not the same as suggested by the examiner that the system can post details of unsold seats or published or advertised price in Claim 38 wherein PHOSITA is modifying to reach our claimed posting. This claim refers to cargo option that has been sold and not as in claim 38 where they are rejected by the first user (unsold).

Even if a system can post does not by itself anticipates in what manner and details it posts. We are unpersuaded that the system can post details for a cargo option, a subject matter not disclosed in either '169 or '127 and an elementary requirement for anticipation. The fact that any modification even minor unless it is taught, can only mean the element is not anticipated.

Accordingly, as this claim is also dependent on claim 39 and hence incorporates all its limitation, we respectfully ask the examiner to allow this claim.

Claim 43.

This dependent claim is cited as a 35 USC 102(e) rejection as being anticipated by Walker et al (6085169). (herein '169)

We have added "receiving a user request in the form of shipping information to purchase an existing cargo option".

As for the rejected elements;

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“ scanning for any ready seller matching at that price or lower in open database.”

We have amended “open” to “cargo option” and added “open to all users” to retain the character of open and make it clearer we are referring to the cargo option database.

The examiner offered this evidence at Col 20, lines 5-30 which refers to user select for himself which airlines acceptance. The evidence also points to how a selection is done to see if the CPO is accepted by at least one airline and how a tie-breaker program is executed if more than one airline accepts the CPO.

We submit that “ scanning for any ready seller matching at that price or lower in option database. “ is not anticipated. In particular the term “ready seller” means priced cargo option is still being offered and placed in the option database within the central controller. While a database exist in Walker ‘169, there is no option database in Walker ‘169. The word ‘open’ means the information being scanned are available to all which is not the same as in Walker ‘169. In the evidence, it provides CPO offers that are already accepted by the airlines. A CPO offer that is accepted is a DONE deal by the airline which is binding except for the selection. A ready offer is still offer in progress and is NOT done

Furthermore there is no suggestion that the comparing methods in Walker ‘169 is able to search for a lower price. As mentioned CPO is a predefined price offered by user and even if there is a lower price, such price is not offered.

The operative “matching at that price or lower “ is critical since in Walker ‘ 169 there is no procedure for checking for a lower price and as mentioned, the CPO works like an offer and if it is above or equal to the minimum price, then the offer is accepted else it is rejected or counter. Therefore, the ability for a CPO issuer to get a lower price is excluded even if it should exist in the CPO rules. In short the CPO issuer gets what they offered or a counter offer or rejection. A counter offer if available means the first submitted price is too low and therefore a counter is by designed a higher price and not as in our claimed, a lower price. A counter is taught to include a markup of 10 percent as an example. (Col 17, line 45-49).

Element “ posting the details to a transaction database which is accessible by all users over the network”

Finally, as we previously submitted in claim 42, there is no teaching of posting details accessible by all users as it may indirectly harm the protective mechanism of the CPO rules.

The evidence provided is Col 9, lines 40-65 showing the CPO database is capable of storing a record of each CPO being processed but no disclosure on posting this CPO for

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public consumption. Therefore, similarly it does not anticipates our posting element. Storing a record does not inherently shows posting as known in the art if there is no desire to do so and no benefit from doing so. In fact as mentioned previously, it actually erodes the system's advantage. Even if a reservation system is capable of posting as mentioned previously, there is no indication that it will post transactions, in particular given the sensitive nature of CPO pre-defined prices.

Therefore, based on our submission here, we are unable to agree with the examiner that the evidence in the '169 fully anticipates our claim. Accordingly, as this claim is also dependent on claim 39 and hence incorporates all its limitation, we respectfully ask the examiner to allow this claim.

Claim 44

This dependent claim is cited as a 35 USC 103(a) rejection as being obvious over Walker et al (5797127). (herein '127). However, it is also written that this claim is rejected under 35 USC 103(a) as being unpatentable over Walker '127 and Walker '169 at page 13 of Letter. Given that the detail rejection shows only rejection by '127, we assumed this prior art to be the basis of the rejection.

The examiner provided the evidence at Col 3, line 20-50, col 5, lines 40 to col 6, lines 10 from Walker '127

Col 3, line 20-50 described how a passenger provide details of his flights to price a ticket option which includes dates, destinations but these do not disclose type of cargo, range of option fees and a selection of cargo service providers.

Col 5, line 40-Col 6, line 10 shows similarly as above but also do not address the type of cargo, range of option fees and a selection of cargo service providers.

Given that this is a 103(a) rejection, there must be a reason to show why the missing elements as above are obvious from reading Walker '127. The letter did not provide any reason for this. In alternative, why would the buyer in Walker '127 submit a range of option fees when he is depending on the apparatus in Walker to provide the option fee. The inherent teachings if any still do not address type of cargo or a range of option fees. As this is a 103(a) rejection, the consideration is one of the whole claim which depends on claim 43 which we have responded that neither Walker '169 or '127 address the issue where the buyer is considering to purchase an existing cargo option offered by ready sellers. No reasons have been advanced to show this obviousness rejection which is required even for a single reference.

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Lastly, given that this claim is dependent on Claim 43 and its limitations, we respectfully ask the examiner to allow this claim given our previously provided rebuttal.

Claim 45

This dependent claim is cited as a 35 USC 103(a) rejection as being obvious over Walker et al (5797127). (herein '127) at page 16 of Letter. However, it is also written that this claim is rejected under 35 USC 103(a) as being unpatentable over Walker '127 and Walker '169 at page 13 of Letter. Given that the detail rejection shows only rejection by '127, we assumed this prior art to be the basis of the rejection.

This claim 45 depends on claim 39 and therefore includes all of the limitations.

The element "receiving a user's request to settle user's cargo option contract"

We have amended this to show this is a cargo option. The examiner's evidence (Col 7, lines 25-45) is also not responsive as said discloses the user buying an option and not settle an option. We are unsure if this is being mis-interpreted by the examiner whereby "settle" is "purchase" when in our claim this "settle" means paying for the underlying cargo services. Our use of the word "user's option contract" clearly indicates that the user is the owner of the contract and therefore we cannot explain why said contract need to be purchase again.

Similarly "performing a payment transaction to pay the final price to the service provider providing the cargo service". The examiner's evidence (Col 7, lines 40-50) discloses paying for a ticket option but not one for cargo service.

Similarly "updating a database to reflect the settled cargo service in both the said user's and service provider's accounts". The examiner's evidence (Col 7, lines 50-65) shows updating an option database for airline ticket option that are newly purchase rather than as in our claimed, settled cargo services. To avoid any future confusion, we will amend this "to reflect the payment in settlement for cargo service.."

In fact, Walker '127 did disclose 'exercising option' in FIG 6 which shows the "settle" element.

Since the word 'settle' is not found directly in our specification and while it is well known in the art of finance that settle means paying for the contract services, we have no objection if the examiner wish to qualify this to 'exercise' which is found at the date of filing.

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Given that the examiner did not provide any reason to support this 103(a) rejection, we have to assume that the inherent teaching of the reference is used to support an obviousness rejection. Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference. See B.F. Goodrich Co. v. Aircraft Breaking Sys. Corp., 72 F.3d 1577, 1582, 37 USPQ2d 1314, 1318 (Fed. Cir. 1996).

In particular, there is no teaching of settlement for a cargo option in Walker '127. We could not identify any inherency within a ticket option that must necessarily shows a cargo option and settlement thereof.

Furthermore, there is no suggestion in Walker '127 to post details of a transaction which is accessible to all users over the network. Walker merely suggests the use of the central reservation system in lieu as per FIG 1 in Walker '127.

The examiner further suggested that an airline reservation system in '127 is capable of posting price and seat capacity. As this evidence is not found in '127 directly, we like to call the examiner to provide evidence for this assertion in the form of judicial notice drawn from personal knowledge or affidavit under 37 CFR Section 1.104. (In re Sun, 31 USPQ 2d 1451 (Fed Cir 1993 (unpublished))).

As we submitted earlier, the fact is that even if the system is capable of posting, by itself does not make it obvious for one skilled in the art to modify it to posting details of the actual transaction details for a cargo option settlement, a subject matter unknown in Walker '127. Furthermore, we are not claiming to post seat capacity as there is no seat capacity in our cargo option.

It is well-known in the art that a reservation system is for reserving a seat. Once a purchase is done, details from the reservation system is transferred to the airline system with which the ticket is purchased. There is no airline system that is capable of posting the actual transactions for access by all. Airlines are not allowed for security reasons to post customers' details. For privacy reasons, we are also doubtful that any airlines would like to post their customer's details online even if their customers have consented. Our claimed element specifically call for the settlement details to be posted and not merely selling price or seat capacity as suggested. One has to distinguish between published price and actual transaction.

As stated on In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981) " The mere fact that something may result from a given set of circumstances is not sufficient." There is also no evidence that by posting price and seat capacity, the users will know what is taken and by whom, the subject matter of the actual transaction being settled. As mentioned, the airline reservation known in the art merely books a ticket. Booking a seat is not translated to buying a seat. A booking may end up without the customer purchasing a seat. The system is well known in the art to facilitate booking and place customer on

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queue. Given what is known in the art and practiced by the ordinary skilled in ticketing, we are doubtful that what is suggested by the examiner must necessarily flow from the suggestion shown so far.

In contrast, our claimed invention, we require transparency to the exact details of cargo options that are settled or sold or being offered. As mentioned in our specification, users are allowed to use their handles if they wish to protect their identities. (page 14 line 8). Also well known in the art is that most cargo users are known in the business as forwarders and therefore having their name published is a measure of their business activities. Therefore, it is a subtle advertising for them. The same cannot be said of airline ticket which is sold directly to passengers.

Furthermore, obviousness rejection requires the claim to be considered as a whole which means Walker '127 has to provide motivation for one skilled in the art to modify to reach our cargo option settlement and posting of details. The inherent teaching of posting something merely assumes that the feature is apparent but does not further with a reason for modifying to reach our transaction details. For a 103(a) obviousness rejection, there must be a reason or motivation found in the prior art. None has been alluded.

In light of the above, Applicant respectfully submits that claim 45 is also patentable over Walker '127 in light of what is known in the art.

Claim 46.

The subject matter of this claim has been moved to claim 39 which forms the independent claim. However, we have amended this claim now to shows the element of an exchange which is not obvious or anticipated in either Walker '169 and '127. Furthermore, we added the element of cargo being serviced by air, rail, sea or space carriers which are not anticipated by either references except for air carriers.

Claims 47. (Walker 6085169)

Note that this claim has been deleted because we need this claim for the use of another new claim 55. However, the applicant wish to provide rebuttal as below to show the rejection is actually not supported.

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This claim 47 is stated as rejected under 102(e) as anticipated by Walker '127 (at page 7). However, the examiner used another reference Walker '169 to show anticipation at page 9. We are unsure whether the examiner wish to use Walker '169 as a secondary reference to support any inherency matters in the primary reference or that this is a typo. In supporting inherency, the examiner is expected to explain the rational or technical feature which is lacking in this rejection. "In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). Based on this, we assume it is more likely to be a typo and this anticipation rejection is within Walker '169.

CASE A : Assuming 169 is a single reference used to anticipate

For the preamble, " computer executable program at the cargo system with steps operative to control a computer...", the letter provided Abstract of '169 as evidence. However, none of the evidence anticipates a cargo system.

For the element "a step of receiving final price payable, destination of cargo, arrival date of cargo, departure date, departure location, flexibility of arrival date, type of cargo, and route criteria, collectively known as user's shipping information via central controller from user;" the letter provided Col 3, lines 40-60) from '169 and hence is dependent on inherency. The evidence in Walker '169 shows a user submitting a CPO but nowhere does it anticipate a CPO to have "type of cargo". We respectfully submit that this evidence has not fully anticipates.

For the element "a step of discovering suitability of user's request at a cargo system involving; ", the letter provided Col 3, line 40-60) As submitted above, no explanation is provided as per case law *Ex parte Levy* as to why a cargo system must necessarily exist in Walker '169 and even if the airlines system in '169 shows some of the common computer features that does not by itself anticipates a cargo system. We respectfully submit that this evidence has not fully anticipates.

For the element "calculating the number of weeks before departure date(s) assigned by cargo system and send this data to central controller; checking the loading capacity of the transporter and send this data to central controller; calculating the standard deviation of the freight cargo prices and send this data to central controller; assumes the weather conditions for both departure and arrival date(s) and sent this data to central controller; " the letter provided Abstract as evidence. As mentioned, the airlines system does not calculate the standard deviation of cargo prices since such prices does not exist in an airlines system. The fact that an airline system has prices does not fully anticipates cargo prices. The airlines system does not disclose calculating the number of weeks since this requirement is not a factor in a CPO.

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In sum, the applicant is unpersuaded that the examiner has a reasonable case in anticipating all of them. As stated by the board in *Ex parte Skinner*, 2 USPQ 2d 1788 (BPAI 1987) at 1789 (citing *In re Swinehart*, 439 F.2d 210, 169 USPQ 226 (CCPA 1971)), "Nevertheless, before an applicant can be put to this burdensome task, the examiner must provide some evidence or scientific reasoning to establish the reasonableness of the examiner's belief that the functional limitation is an inherent characteristic of the prior art." In our case, it is not only limited to the functional limitation but also the structural limitation of the cargo system which we believe the examiner has not provided sufficient technical or factual data to advance the case of *prima facie*.

This claim refers to program executable at the cargo system. This rejection is respectfully traversed since Walker 6085169 fail to show a cargo system at the outset. The rejection is respectfully traversed.

CASE B: Using Walker '127 as the primary reference and Walker '169 as the secondary reference.

There are only 3 circumstances when the introduction of another reference is warranted in a 102(e) rejection and since the examiner did not explicitly explain which case we have to assume in this case to show inherency where the necessarily function of the feature must be present. 2131.01 which states 3 circumstances:

- (A) Prove the primary reference contains an "enabled disclosure;"
- (B) Explain the meaning of a term used in the primary reference; or
- (C) Show that a characteristic not disclosed in the reference is inherent.

Since it is not A nor B then we have the unstated assumption that the letter had applied inherency here to reach our claim by using '169 to show the necessarily missing functionality or characteristics. If the missing element is "cargo system", it appears that the letter fail to explain why said must necessarily be revealed in the primary reference '127 or similarly must necessarily be shown in '169. Moreover this structural limitation was never found in either of the '169 or 127. Even if assuming the missing structure is an equivalent 'airline system' which is found in both prior arts and the features as described in '169 to show inherency, one can only read such features to be must necessarily present in an airline system and not in a cargo system. To make the leap from airline system to cargo system would require more evidence. For example, any general purpose computer is capable of receiving input, storing input in a medium, calculating and responding, features as show in our claim preamble but on its own without a special program does not make it into an airline system or cargo system.

To show an airline system is capable of anticipating our cargo system requires a showing that it is capable at least of determine logistic and commercial suitability of shipping information, calculating standard deviation of freight prices. (Note the issue on

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calculating standard deviation as a USC 112, para 1 rejection has been rebutted above by our showing that such matter exist in our first filed application and is not new matter. As to the descriptive requirement we submit that it is within the level of one skilled in the art based on re Skrivan Id). Since the evidence submitted by the letter does not disclose these elements, we respectfully ask this element be allowed.

Claim 48. (Walker 6085169)

This claim refers to program executable at the central controller and is rejected by 102(e) in view of Walker '127 (at page 7) however in page 9, it states that Claims 47 and 48: Walker et al (6085169). The rejection by the examiner is the same as Claim 47. However, we submit that both claims 47 & 48 are not identical and hence while common elements have been addressed by the examiner, elements unique in Claim 48 have not been addressed.

The rejection is respectfully traversed. For a 102(e) rejection all elements must be present. In particular, the following elements are missing from the claim rejection. It is also well settled that functional limitations must be given weight in claim examination. (For example in Re Land, 368 F.2d 866, 151 USPQ 621 (CCPA 1966)) and the examiner is not permitted to dissect the claim and remove the functional limitations before determining anticipation.

In preamble, the elements/functions “ query cargo systems, secure cargo shipping service, display option contracts, bid and offer quotations online ..” are missing or not given examination weight.

Similarly in the body of the claim, these pertinent elements are missing or were not explicitly examined:

A step of sending user's shipping information to a plurality of connected cargo systems;
A step to execute the program to calculate the option fee;
A step to query the selected service provider to confirm before completing the acceptance;
A step to update option details in transaction database accessible by other users;
And where user cancel this option fee, a step to provide this option contract and arranged them to be available to other users for a limited period;

Even if all these elements were previously examined in another form found in another claim, it is submitted that it is not appropriate to pick these examined elements (even if they are the same or identical) for the purpose of applying them in another claim. The main issue here is that these elements may have been rejected by another legal section such as a 102(e) and or a 103(a) or that the elements may constitute claims of a different

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class and combined with different limitations. In particular for 103(a) rejection, the claim as a whole must be examined.

If the element is missing then inherency may be used to support what is necessarily must be present as seen by one ordinary skilled in the art from the teaching of the prior art. As we mentioned previously, various elements are missing such as cargo system, type of cargo, calculating option price, displaying open option contracts and so on. In particular Walker 6085169 uses a CPO wherein one of feature is where user is not allow to check price by resubmitting a CPO in conflict to our step for user to change the initial shipping criteria.

The examiner has also stated that confirming suitability of weather based on various dates within the limits of user's flexibility factor at cargo system as the missing element but it should be obvious since weather conditions clearly affect the availability of transportation. (at page 10, second paragraph). The question in anticipation rejection is not one of obviousness but one of anticipating explicitly or inherently. If the element is not anticipated how would it be obvious given there is no teaching other than found in the applicant's disclosure. As we have submitted earlier the 'weather' element was disclosed in Walker '169 and in '127 Col 3, lines 38-40 where it is said to affect ticket price so the limitation of weather is anticipated.

Lastly, as noted in *Lindermann Maschinenfabrik GmbH V American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed Cir 1984) (citing *Connell V Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed.Cir. 1983)) (emphasis added), the prior art reference must disclose each element of the claimed invention "arranged as in the claim". Given that at least one of the elements (say cargo system) is missing from our above discussion, we are doubtful that the prior art is capable of satisfying arranged as in the claim.

We have amended this claim to follow the elements in claim 39 but in a different class. The reason for doing is to present claims that are as closely worded as the dependent claim as possible. Given that this claim is now dependent on Claim 39, we also submit that we incorporate our rebuttal in Claim 39 for this our currently amended claim.

Claim 49.

This claim is rejected by 102(e) in view of Walker '127 (at page 7 of letter)

Anticipation requires that the prior art reference disclosed, either expressly or under the principles of inherency, every limitation of the claim. We respectfully ask this rejection be traversed. Walker et al '127A did not disclose purchasing a cargo option contract from

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at least one cargo service provider for a cargo freight route. The examiner had earlier admitted that explicitly there is no cargo system (see page 7 of letter, last paragraph). We have also argued that an airline reservation system may not necessarily reveal a cargo system as seen by one ordinary skilled in the art and therefore is not inherent. Inherency cannot be established by probabilities but may only be supported by evidence. We have not seen any evidence here to advance this.

Evidence (Abstract, col 2, lines 19-47). These evidence shows a method for determining a price of an option to purchase an airline ticket and facilitating the sale and exercise of those options. Pricing of option may be based on departure location, destination and travel criteria. By purchasing an option, a customer can lock in a specified airfare without tying up his money and without risking the loss of the ticket price if his travel plans change. Similarly in Col 2, the evidence repeats much detail about the advantages and pricing mechanism but nowhere does it teach or show pricing for a cargo option. The difference between a cargo option and a ticket option as disclosed in Walker '127 is not recognized as the same by one of the ordinary skilled, just like a financial option is not the same to a ticket option. The reason for this was advanced by Walker '127 Col 3 line 1-3. Similarly, the limitation of cargo service provider is also missing which does not inherently shows cargo service provider can be one using rail, sea or space carriers.

Evidence of Col 6, lines 5-40 disclosed a method to hedge the cost of airline tickets by using an option instrument. Flight information may share some features such as route but it does not inherently shows type of cargo or in another type of transporter other than aircraft. A plurality of cargo systems is not found. We have amended this to "at least one cargo system" which inherently means the same.

Evidence (Fig 1, col 6, lines 15-16) shows the structural limitation for purchasing an airline ticket option but does not show a cargo system nor any of the functional limitation such as sending cargo information or determining suitability. Fig 1 of ' 127A describes an airline central controller being linked to airline agent terminals and similarly we submit this may not necessarily reveal a cargo system as known by one skilled in the art. The Federal Circuit has also added that " the [prior art] reference must describe the applicant's claimed invention sufficiently to have placed a person of ordinary skill in the field of the invention in possession of it. " Re Spada, 911 F.2d 705, 15 USPQ 2d 1655, 1657 (Fed Cir 1990). Furthermore our amended claim shows calculating a cargo option. Cargo option is not known in Walker ' 127 and as mentioned, nor can a ticket option shows cargo option inherently because of its different functional limitations. For example, an airline would not accept an airline option to purchase services related to cargo services even if both 'space' is found within the same aircraft and vice-versa.

Evidence (Abstract, col 5, lines 1-15, col 7 lines 35-65) shows the various limitations such as a terminal and the updating process when an option is sold but it does not reveal the element of making the transactional data available to other users. We have previously pointed out because of security and privacy reasons, this step is not done within the art.

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We respectfully submit since Walker's '127A relates to options and airline ticketing system, one skilled in said arts would not necessarily be able to read our claimed invention due to the missing elements needed to reach it. Similarly, when a prior art process has been altered or modified, anticipation will likely not be found. (Carnegie Steel Co V Cambria Iron Co., 185 US 403 (1902)

However to expedient our application, we have decided our amendments to include further limitations whereby cargo is serviced by air, rail, sea or space carriers which is not anticipated by Walker 127.

Claim 50.

Claim 50 is rejected as obvious under USC 103(a) over Walker 5797127 and Walker 6085169 at page 13 of letter. However the detail claim rejection only includes Walker '127, a single prior art for this obviousness rejection at page 16. As mentioned, even in a single reference there must be reason or teaching to motivate the PHOSITA to reach our claimed invention.

This rejection is respectfully traversed. Claim 50 depend from Claim 49 and therefore include all of the limitation of claim 49. As discussed above, it would not have been obvious for one viewing Walker '127 in light of what is known in the art to provide a pricing system for a cargo option as in the claimed invention.

The evidence Walker '127 (Abstract, Col 3, lines 40-60) shows the network structure of Walker's ticket option system as shown in FIG 1 of Walker '127. However, as we mentioned, the examiner could have misinterpret 'settle ' as purchase. In any event, Walker actually shows exercising an option at FIG 6.

However, there is no suggestion or teaching in Walker '127 which shows cargo option or settle the final price with the service cargo provider. The question is why would Walker '127 modify the steps for exercise a ticket option to one of a cargo option. Even if it is a single reference, there must be teaching. However, the inherent teaching of a prior art reference can be used to support an obviousness rejection when said features are not explicit. (In re Grasselli, 713 F.2d 731, 739, 218 USPQ 769,775 (Fed Cir 1983). In this case, no reason was advanced to show the missing features are inherently based on the teaching of Walker '127.

Walker '127 lacks essential features such as a cargo option to settle and there is no freight cargo service and cargo service provider. Therefore, it does not satisfy the inherency requirements to support an obviousness rejection as well. As stated in Ex parte Levy, 17 USPQ 2d 1461, 1464 (Bd Pat App % Inter. 1990), technical or factual reasons are

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required to show inherency such as to explain the inherent properties of a cargo option must exist in a ticket option.

Assuming the existence of a general purpose computer as well as typical programming techniques therefor, it is plain that applicant's invention as defined in this claim is not obvious under 35 USC 103(a) because one not having the knowledge of this claimed invention would not know how to program the computer to settle the cargo option. The examiner did not provide any reason for this obviousness rejection or why one skilled in the art would be so motivated. Even if the motivation may come from the nature of the problem, as stated in *Zurko I*, the problem must be known in the prior art. Walker '127 does not deal with cargo fees or cargo space and certainly do not teach of the problem.

As such, Applicant respectfully submits that claim 50 are also patentable over Walker '127A in view of what is known in the art. Likewise, Walker '127 does not disclose the subject matter of the claimed invention in the independent Claim 49 wherein this claim rely on its limitations.

Claim 51.

This claim is rejected under 102(e) as anticipated by Walker '127.

This rejection is respectfully traversed. Claim 51 depend from Claim 49 and therefore includes all of the limitation of claim 49. As discussed above, it would not have been anticipated for one viewing Walker '127A in light of what is known in the art to provide a pricing system for a cargo option as in the claimed invention. As such, Applicant respectfully submits that claim 51 are also patentable over Walker '127A in view of what is known in the art.

Furthermore, the evidence provided by the examiner (Abstract, Col 5, lines 41-64, Col 6 lines 40-67, Col 7, 1-26) do not show elements "shipping information, type of cargo,". And these are not inherently found in travelling information for an airline ticket for a human passenger. Anticipation requires all elements to be identified either explicitly or inherently. If it is inherently, then the examiner has to provide reasons to show that the missing features must necessarily exist. None has been produced.

Claim 52

Claim 52 is rejected under 102(e) as being anticipated by Walker '169 (CPO)

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This rejection is respectfully traversed. There is no evidence that ' 169 wherein disclosed a CPO or in layman terms " name your own price offer " could be identified with a cargo option. In particular the reference made no suggestion for cargo services and in principle said CPO is an invitation to contract whereas an option is a contract that is non-binding satisfy by the cargo option fee which is calculated and paid. It is well known in the art that an invitation such as a CPO carries no consideration and no fee is payable on submission of the said CPO. Simply because the cargo shipping information carries a final price or remaining payment does not anticipates the pre-define price the customer wish to offer as in a CPO. As disclosed in our specification, the remaining payment is the balance needed to secure the services and not as in a CPO where the price offered is for the full purchase of the ticket. There is no remaining payment necessary in a CPO and the offered price is the full ticket price.

While ' 169 taught of several airlines reservation system responding, it is submitted that said system is not identifiable as a cargo system nor said airline reservation must necessarily functions like a cargo system.

The question is whether said reservation system is capable of functioning as a cargo system. For example, we are not convinced that an airline reservation system must necessarily have freight cargo space prices or able to track a cargo, airway bills and custom manifestation linked to the cargo, elements known in the art. Even if said system is able to calculate standard deviation does not by itself anticipates cargo prices, the element that is missing. The cargo system can also determine if the cargo is suitable because cargo comes in all shape and sizes and users requirements such as speed, destination such as in outer space etc. We do not know of any airline system that determines type of passenger by their size or weight.

An element may be inherently disclosed by prior art if "the prior art necessarily functions in accordance with the limitations" of the challenged claim. *King*, 801 F.2d at 1326; *see also Standard Havens Prods., Inc. v. Gencor Indus., Inc.*, 953 F.2d 1360, 1369 (Fed.Cir.1991), *cert. denied*, 506 U.S. 817, 113 S.Ct. 60, 121 L.Ed.2d 28 (1992). The examiner has not adduced any evidence to show that an airline system or reservation system must necessarily function in accordance to our claimed limitation without any modification.

The letter's only evidence (col 8, lines 60- col 9 line 6) only shows a communicative network design for a CPO system to communicate with central controller, clients and air line reservation system and said evidence did not show cargo systems, type of cargo and cargo pricing information or functional limitation such as determining a fee for an option contract to secure a freight cargo service.

We are unable to reconcile all the elements here with the presented evidence.

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However, we have decided to amend this claim so that it closely match our method claim 49 albeit in a different class. This is done not because of avoiding the prior art as we have presented our rebuttal above. The elements as discussed above are retained as per our Claim 49 and this claim is a system class implementing the method of claim 49. Similarly our rebuttal in Claim 49 is incorporated herein.

We respectfully ask this claim be allowed for the reasons stated above.

Claim 53

Claim 53 is rejected under 102(e) as being anticipated by Walker ' 169

This claim is related to purchasing the cargo option and exercising it later by paying the final payment.

In rejecting this claim the examiner applied 102(e) anticipated by Walker ' 169 the CPO disclosure and provided the evidence (Abstract, Col 10, lines 5-25). Nothing in this evidence shows the settlement of a cargo option nor the purchase of the option contract. The evidence shows the structural limitations of a network but did not give weight to the functional limitation. The examiner has to give weight to all elements in determining anticipation as these functional limitation are build into the memory structure recited. In re Land 386 F.2d 866, 151 USPQ 621 (CCPA 196) The Federal Circuit has interpreted functional language in an apparatus claim as requiring that an accused apparatus possess the capability of performing the recited function. See Intel Corp V US Int'I Trade Comm'n, 946 F.2d 821, 832, 20 USPQ 2d 1161, 1171 (Fed Cir 1991)

As mentioned, a CPO is an offer and at the time of acceptance by seller, the airline ticket is booked not purchase. However, a booking is almost the same as purchasing since a CPO is a binding offer. (col 5, line 32). The CPO is accepted with a set of rules but nothing in these rules shall release the obligation of the buyer. This is in contrast with an option where it distinctively provides non-obligation clause to release the buyer's obligation from the underlying service. This critical difference between a CPO and an option means one skilled in the art could not read a CPO in the same light of as an option further to reveal our cargo option. The applicant therefore cannot concur with the examiner's attempt to anticipate this claim and respectfully ask this rejection to be withdrawn.

Furthermore, this claim is dependent on Claim 52 which embodies all its limitation to which we have argued previously are not meet under the anticipation standard inherently or explicitly.

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However, we have decided to amend this claim so that it closely match our method in claim 50 albeit in a different class. This is done so not because of avoiding the prior art as we have presented our rebuttal above. The elements as discussed above are retained as per our Claim 50 and the amended claim is a system class implementing the method of claim 50. Similarly our rebuttal in Claim 50 is incorporated herein.

We respectfully ask this claim be allowed for the reasons stated above.

Claim 54

In the preamble, we have amended this claim to relate to secondary or existing options for cargo services and to make this claim as an independent claim. However, this does not change the substance of the claim since the element "sell existing option contracts" is previously present to identify this is a claim for existing cargo option. In rejecting this claim the examiner applied 103(a) in view of Walker '127. In obviousness rejection, there must be teaching even when there is only one reference.

The element "having a user sell existing cargo option by listing them in a database" with the evidence (Col 4, line 40-55). The said evidence only disclose a database limitation and ignores the 'user sell existing cargo option'. We submit there is no inherent evidence to show in Walker '127 that it must necessarily shows it is able to list existing cargo option by user for the purpose of selling it and hence this functional limitation is not met. And because not all the features are met, then a reason is required to reject this element under 103(a) which is not apparent here.

The element "having a buyer select the cargo option and confirm selection" with the evidence (Col 3, lines 40-60). The said evidence shows Walker '127 discussing the case where the customer has a very flexible in terms of flights route or schedule where he is able to choose the flight with lowest fare and continue disclosing implicitly that the buyer has a choice on the various ticket options being priced for his choosing. In arguendo, assuming the features requirement is met here, we submit that while the user is able to choose various ticket options by itself does not make it obvious the prior art is capable of letting the user to select an existing cargo option submitted by another user as viewed by one ordinary skilled. At best, the prior art show it is obvious to select something but not obvious enough to show the thing that is being selected. Walker '127 only disclosing options being priced by the central controller and similarly offered by said. There is no inherently teaching to show it is able to list other cargo options. No reason is provided to show this obviousness.

The element "upon agreement, performing payment transaction to credit the payment from the seller of the said cargo option and debit the account of the buyer." with the evidence Col 9 lines 50-65. Said evidence shows Claim 5, 6, 7 of Walker 127. Claim 5

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shows determining a price of an option to purchase an airline ticket while Claim 6 describe a program adapted to receive option pricing information and in claim 7 shows the program is able to receive some information to calculate the option price. We submit that the evidence is not responsive to our element above showing payment transaction between a seller and a buyer. And because this rejection does show the inherent features requirement and further lacking a reason as required by 103(a) therefore it fails to show obviousness.

The element "notifying the cargo service provider" with the evidence at Col 7, lines 55-67. Said evidence disclose that the number of options sold may be used as a factor in determining the future prices and the customer database be updated when a customer has completed a purchase of a given option. We submit this is not responsive and fail to meet the all features requirement and therefore requires a reason to sustain the 103(a) rejection. Furthermore, it does not reach our claim element since our case involves the change of ownership and hence cargo service provider has to be notified of the same. We have amended this element to be clearer by notifying the cargo system providing the underlying cargo service of the cargo option. In theory, it is not technically right to notify the provider but rather the system of the provider.

Lastly the letter provided Walker '169 to combine with '127 to show obviousness and introduced evidence Col 13, line 60-Col 18 line 60) to show the elements of updating database to reflect change of ownership, details accessible by all users and central controller receiving a fee for its services. The evidence is mainly on database usage in '169, the so-called database chapter. However, there is no reason cited as to why it would be obvious to show the transactional details. Indeed in Claim 38 we have responded that providing details of a CPO transaction is contrary to the CPO mechanism which maintain secret CPO rules to avoid discovery of the underlying CPO rule minimum price and attached conditions which can only benefit other users and competitor airlines.

The letter suggested that the motivation to combine the references is because both references deal with different aspect of reserving space on an airplane ahead of time and treating the reservation as an option negotiated ahead of time. We respectfully disagree with the motivation because neither references are in reserving space. There is a difference between reserving seats and space. The latter is not disclosed. Walker '127 deals with airline ticket options and Walker '169 deals with CPO, an user initiated offer system. In fact Walker '169 is not directly related to reserving space (actually seats as airlines cannot sell space) since once a CPO is accepted it is booked and such a booking is binding resulting in a ticket. Walker '127 actually stressed the reason for ticket option is to lock in low price as the motivation (See Walker Col Line 40) and not directly to reserve space or seat. In short, seat or space are secondary because the user wants to take advantage of the ability to lock in low fees. Therefore, if the fees are high, it is unlikely there will be any motivation to reserve space (seat). Similarly for Walker '169. The application of CPO is to see if the submitted offer price will be accepted, presumably the offered price would be lower than regular price. Although the final outcome has the

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appearance of reserving space (seat), the reservation of space is secondary. Therefore, it would be more accurate to reserve space (seat) at a low price or offered price as in Walker '169.

Alternatively, because the two different prior arts deal with different aspect of reserving space (seat), what is the motivation to combine ? The examiner has stated a fact known in both prior arts which is each prior art has its own unique way to deal with reserving space. The question is if they are different, what is the incentive for them to combine ? There is no description in either prior arts showing a problem can be overcome by combining. In particular, Walker '127 did not show selling existing options. The fact that they are different alone could not be a reasonable motivation to combine as seem to be suggested by the examiner. The issue here concerns assigning rights and updating database, therefore the motivation has to be related to the claimed issue. The question is, assuming Walker '169 actually disclose assigning rights, what is the benefit to Walker '127 in view of Walker '169 of integrating this feature. As we recalled, Walker '127 did not even disclose able to offer existing cargo options to others so why is there a need to assign rights ?

In Walker '169, the patent deals with a conditional offer which is well known cannot be transferred or bought since it is only an invitation to purchase.

While Walker '169 teach of updating database the applicant is not able to find any teaching in assigning rights. It would be appreciative if the examiner can point out distinctively the reference for this. By providing a whole chapter on database does not provide the clarity needed as evidence. And even if assigning rights is taught, it must further show within the context of change in ownership to reflect an existing cargo option contract has been assigned to a new buyer.

We are unable to ascertain how this combination even if motivated will reach our claimed invention of transferring ownership of cargo option and providing details of the transaction online. In Walker '127 and '169 there are no teaching of transferring of ownership where a buyer sells a pre-owned ticket to another after the initial purchase. As always in a 103(a) rejection, a claim must be read as a whole and this claim relates to existing cargo options being resold. There is also no teaching in either reference to combine each other features, a crucial missing element to show obviousness. The fact both patents reveal different ways to reserve space alone cannot be a motivation to one skilled in the art

Lastly, we submit the fact that PHOSITA has the level of skill to modify is not a proper reason to show obviousness as there must be teaching or motivation in the prior art. That which is within the capabilities of one skilled in the art is not synonymous with obviousness. (see Ex parte Levengood, 28 USPQ 2d 1300 (Bd. Pat App & Inter 1993). In theory, the PHOSITA would always be skillful enough to perform the modification

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having read the claimed invention. The question is why would it be obvious to combine and this answer has to be found in the prior arts and not in our application.

We respectfully ask this rejection to be traversed.

---End of claims rejection response---

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Summary Claim Amendments:

Previously, total claims 26 consisting 9 Independent and 17 dependents. Current amendments have total claims 26 consisting 7 Independents and 19 dependents as arranged below:

Previous Independents	Previous Dependents	Current Independents	Current Dependents
29	30,31	29	30,31
32		32	55
33	34,35,36,37	33	34,35,36,37
38		38	
39	40,41,42,43,44,45,46	39	40,41,42,43,44,45,46,48
47		49	50,51,52,53
48		54	
49	50,51		
52	53,54		

Declaration 37 CFR 1.132

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of any application, any patent issuing thereon, or any patent to which this verified statement is directed. My signature and address is as follows:

Yours truly,


Khai Hee KWAN
30 July 2003

P.O.Box 1178
Sandakan 90713, Sabah, Malaysia

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Marked Version of Claims

Appendix 1

29. ~~(Currently Amended) A data processing apparatus~~ An interactive electronic cargo option exchange for cargo service providers to manage cargo space freight fees risk in an interactive electronic exchange between registered users and cargo service providers by electronically determining the price for pricing said risk as an option fee in accordance to the terms of cargo option a contract to secure the underlying cargo service at a pre-agreed final price within a preagreed future period, said priced contracts and for existing cargo option may to be sold, bought and settled comprising:

a central controller including a CPU, database and a memory operatively connected to said CPU;

at least one service provider's cargo system including a CPU, ~~database~~ and a memory operatively connected to said CPU, said cargo system adapted for communicating with said central controller over a network;

~~wherein cargo system is connected to a database containing information including but not limited to cargo prices, customer information, route criteria, cargo space availability, cargo space sold, electronic option contracts with respective terms, transporter schedule, loading capacity, type of cargo, type of transporter and planning criteria, having means to update, delete, insert, search, select, match, identify, filter;~~

said memory in said cargo system containing a program means for calculating, selecting, ~~planning~~ and responding adapted to be executed by said cargo system's CPU;

a plurality of terminal devices, adapted for communicating with said central controller, for transmitting to said central controller user cargo shipping information including but not limited to comprising final price payable remaining payment, destination of cargo, arrival date of cargo, flexibility of arrival date, type of cargo, departure date, departure location and route criteria over a network;

wherein said cargo system calculating means uses ~~at least, remaining payment final price payable, weighted average cost of capital of service provider,~~ time period to provide service, current cargo service cost for a selected route to determine the base price, calculating standard deviation of cargo service price;

wherein said cargo system selecting means uses at least, destination of cargo, arrival date of cargo, flexibility of arrival date, type of cargo, departure date, departure location, weather conditions, loading capacity, demand for this type of cargo space, timing issues, cargo price and route criteria to determine availability of service;

~~wherein said cargo system planning means uses said selection and said base price to determine commercial suitability;~~

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~~wherein if service is available planning criteria is acceptable~~ said cargo system responding means to provide cargo pricing information to central controller ~~for further acceptance;~~

said memory in said central controller containing a program to calculate cargo option price, adapted to be executed by said CPU in response to cargo pricing information from cargo system;

~~wherein said central controller calculating means uses current price as determined by cargo system, current loading capacity of a chosen transporter, historical demand for this type of cargo space, the standard deviation of cargo prices up to request time for this service route, acceptable weather data on chosen departure and arrival date(s), data on coincidence of departure date with any public holiday or weekends, the type of transporter selected on this route and number of weeks before departure date, weighted average cost of capital as provided by responsive cargo system also collectively known as cargo information, flexibility factor and type of cargo, final price payable as provided by user and number of competition on the same route as determined by the number of responsive cargo systems;~~

~~wherein said central controller is connected to at least one service providers' cargo systems through a connecting means over a network;~~

wherein said central controller receives said user shipping information criteria from said terminal and ~~uses said criteria to query~~ at least one service provider's cargo system over a network;

~~wherein said central controller receives cargo information from said cargo system having satisfies planning criteria in said system and matches said user's shipping information criteria over a network;~~

wherein said central controller is connected to a database ~~containing but not limited to~~ comprising users account information, including past transaction records of any sale and purchase of cargo option contracts and commitment terms, cargo prices, user personal details including banking accounts, transaction amounts, ~~watch list according to route,~~ type of cargo, transporter, departure destination, arrival destination, ~~alert conditions~~ said accounts are protected by passwords and login sequence; and

said central controller having searching means to ~~search by means of stored conditions or by alert conditions~~ match and rank existing cargo options set by user, means to display with a graphic user interface and means to receive a user request input via said terminal an offer for sale or buy cargo option, and means to receive means to offer priced option contracts and cargo system service request which are posted ~~for sale and bids are placed~~

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~~to attract buyers/sellers for a predetermined period accessible online to other users, in said database exchange.~~

30. (Currently Amended) The ~~apparatus exchange~~ according to claim 29, wherein said program in said central controller's memory means to receive a user request input via said terminal device ~~to purchase or sell or settle the option contracts, search other contracts, offer for sale, offer to buy, means to redirect the selected offer back to the seller for final confirmation and further means to perform a payment transaction through a nominated bank account to sell or buy the posted cargo options on behalf of said user. contracts for the registered user and settled the same for provider or counterparty of said contracts.~~

31. (Currently Amended) The ~~apparatus exchange~~ according to claim ~~30~~ 29, wherein said program in said central controller's memory means to receive a registered user request input via said terminal device to settle user's a cargo option contract and further means to perform a payment transaction through a nominated bank account to pay cargo service provider the remaining payment final price payable for the contract to secure the underlying contracted cargo services ~~in accordance with the terms of the contract and~~ further means to update both registered user's and service provider's accounts in the database.

32. (Currently Amended) A method for cargo service providers to request a cargo option of electronically pricing a cargo option fee contract satisfying a fixed route and a final price and offering it, the method comprising the steps of:

~~querying cargo price for a fixed route and type of cargo;
receiving the cargo price for a fixed route and type of cargo from central controller;
inputting final price payable, destination of cargo, arrival date of cargo, departure date, departure location, flexibility of arrival date, type of cargo, and route criteria to a central controller through a plurality of terminal devices, collectively known as shipping information via a terminal over a network by user;
querying service provider's cargo system based on above shipping information by user;
finding service provider's cargo system that accepts the user's shipping information where each cargo system have their own pre-set determination criteria such as but not limited to the minimum base price, acceptable weather conditions at departure and arrival points and dates based on flexibility factor, availability of cargo space on transporter for the type of cargo for the route in question that satisfy said user's information;
on acceptance;~~

receiving a request comprising cargo pricing information from cargo system responding with cargo information such as the loading capacity of the chosen transporter, type of selected transporter, historical demand rate for

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~~this type of cargo space, the standard deviation of the freight price for this particular route, the forecasted weather on this particular route, timing of holiday period for date of departure, number of weeks before selected departure date(s), collectively known as cargo information over a network;~~

~~sending the cargo information and base price to the central controller from each cargo system wishing to respond to the user's request;~~

~~combining the shipping information from said user, base price and cargo information from responding service provider's cargo system and determining the number of cargo providers competing in this request (s);~~

~~executing a program to calculate the cargo option fee price based on different departure dates where available, one or more electronic option contract that gives the customer cargo service provider the contractual right but not obligation to secure sell within a future period said period equal or less to the period before the selected departure date, the underlying cargo shipping services for a particular route to the seller of said option, for a particular service provider and final at a particular price which satisfied the shipping information; and~~

~~outputting posting the cargo option price fee or fees and corresponding option contract from each responding cargo service provider to await user's response where such offer(s) are open to all users for a predetermined period;~~

33. (Currently Amended) A computer implemented system for determining cargo option price for freight services over a network connected to a central controller linked cargo service providers to a plurality of terminals comprising:

~~_to manage cargo space risk in an interactive electronic exchange between registered users and cargo service providers by electronically pricing said risk as a option fee in accordance to the terms of a~~

~~contract to secure the underlying cargo service at a pre-agreed final price within a preagreed future period, said priced contracts may be sold, bought and settled comprising;~~

at least one cargo system ;

~~having an user input cargo shipping information;~~

~~having service provider's cargo system provide cargo information upon determining suitability of such input by user as transmitted by central controller;~~

~~having a CPU in service provider's cargo system;~~

~~having a memory in cargo system means connected to said CPU, said memory means containing a program adapted to be executed by said CPU;~~

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having said CPU and memory in cargo system means to ~~calculate~~ determine cargo pricing information, the base price and determining suitability of said base price and the shipping information inputted by user and means to response cargo pricing information to central controller, if suitability is acceptable;

having a CPU in the central controller;

having a memory in central controller means connected to said CPU, said memory means containing a program adapted to be executed by said CPU;

~~having said CPU and memory means receive shipping information from user and cargo information from cargo system; and~~

having said CPU and memory in response to cargo pricing information received from at least one cargo system, means electronically calculate a cargo option fee contract price that wherein calculate is based at least in part on the formula below;

Cargo Option price = LC*D*L*C*R*V*W*Q*A*CO

where LC is the load capacity times the base price for the option, D is related to a desired number of weeks before departure date, L is concerning the cargo space demand on the requested route, C is concerning loyalty, R is concerning flexibility, V is concerning the standard deviation of the cargo prices, W is concerning the weather on the departure date, Q is for type of cargo including weight and dimensions, A is for type of carrier and CO is for number of competition on the same route; and

having said CPU and memory means outputting the cargo option price for consideration by user and update the database where said cargo option is available for predetermined period to other users if not selected by first user.

~~gives the customer the contractual right to secure within a future period said period equal or less to the period before the selected departure date, the underlying cargo shipping services for a particular route, for a particular service provider and final price which satisfied the shipping information.~~

34. (Currently Amended) The system according to claim 33, wherein shipping information comprising at least one of the first information concerning destination of cargo, second information concerning arrival date of cargo, third information concerning departure location, fourth information concerning departure date, fifth information concerning flexibility of arrival date and sixth information concerning type of cargo.

~~wherein said information is inputted and transmitted over a network.~~

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35. (Currently Amended) The system according to claim 33, wherein said cargo pricing information ~~cargo system receives information includes first information describing final price payable, second information describing destination of cargo, third information describing arrival date of cargo, fourth information describing the flexibility of arrival date, fifth information describing the type of cargo, sixth information describing the departure date of cargo, seventh information describing the departure location, eighth information describing the route criteria from user wherein said program in cargo system is further means to use at least one of said first information, said second information, said third information, said fourth information, said fifth information, said sixth information, said seventh information, said eighth information to calculate base price, determine planning, and commercial suitability; and wherein said central controller receives information includes comprising:~~ first information describing a number of weeks before departure, second information concerning the ~~historical~~ demand of this type of cargo space, ~~and~~ third information concerning the standard deviation of the ~~freight cargo~~ prices of ~~for the said route, and~~ fourth information on the current cargo price, ~~and~~ fifth information on the flexibility of the cargo arrival date, sixth information on the loading capacity of the transporter ~~at the time of query,~~ seventh information on the predicted weather prevailing on the date of departure and arrival, eighth information on the timing of the transporter, ninth information on the type of cargo, tenth information on the type of transporter selected, eleventh information on the route, on the number of competition, twelfth information on the remaining payment, final price payable, ~~thirteenth information on weighted average cost of capital of service provider and wherein said program in central controller is further means to use at least one of said first information, said second information, said third information, said fourth information, said fifth information, said sixth information, said seventh information, said eighth information, said ninth information, said tenth information, said eleventh information, said twelfth information, said thirteenth information to calculate the cargo service option fee.~~

36. (Currently Amended) The system according to claim 33, wherein central controller is an electronic cargo option exchange and whereby cargo is serviced by air, rail, sea or space carriers.

~~said computer program in said memory in central controller means updates a database to record the information of the relevant contractual parties in their respective accounts and said computer program in said memory in cargo system means to update a database to reserve cargo space pending settlement of option contract, loading capacity of chosen transporter, on the selected route and date(s).~~

37. (Currently Amended) The system according to claim 33, wherein the said program in said memory in central controller comprising :

means to receive a user request to settle user's cargo option;

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means to verify the validity of the cargo option;

means to perform a payment transaction to pay remaining payment to the cargo service provider responsible for providing the cargo service; and

means to update the database to reflect the payment in settlement for cargo service in both user and cargo service provider's accounts.

~~calculates the cargo option fee based at least in part on the formula:~~

$$a = \text{Log}(CP / FP) / 35$$

$$b = (BR + 0.5 * SD^2) * TY$$

$$e = SD * (TY^{0.5})$$

$$d1 = (a + b) / e$$

$$d2 = d1 - SD * (TY^{0.5})$$

$$\text{Cargo Option Fee} = (CP * \text{SNorm}(d1) - FP * \text{Exp}(-BR * TY) * \text{SNorm}(d2)) * L * LD * R * W * T * Q * A * CO$$

~~Function SNorm(z)~~

$$e1 = 2.50662845$$

$$e2 = 0.3193815$$

$$e3 = 0.3565638$$

$$e4 = 1.7814779$$

$$e5 = 1.821256$$

$$e6 = 1.33027445$$

~~If z > 0 Or z = 0 Then~~

$$w = 1$$

$$\text{Else } w = -1$$

~~End If~~

$$y = 1 / (1 + 0.2316419 * w * z) / 10$$

$$\text{SNorm} = 0.5 + w * (0.5 - (\text{Exp}(-z * z / 2) / e1) * (y * (e2 + y * (e3 + y * (e4 + y * (e5 + y * e6))))))$$

~~End Function~~

~~where L is the factor related to load capacity, TY in Years to departure, FP is the Final Price Payable, BR is the Borrowing Rate of service provider, LD is a factor concerning the historical demand for this type of cargo space, R is a factor concerning flexibility of cargo arrival date, SD is the instantaneous standard deviation of the freight cargo prices as measured in logarithmic returns, CP is the current cargo price, W is a factor concerning the weather on the departure date and arrival date, T is a factor concerning timing of departure date such as in holiday period or otherwise, Q is factor for type of cargo including weight, dimensions, A is for type of transporter and CO is for number of competition on the same route;~~

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~~wherein the calculating step of said program in said memory in cargo system calculates the standard deviation of the freight cargo prices or implicitly from actual transacted option fee of similar terms; and
wherein the calculating step said program in said memory in cargo system calculates the base price at least in part on the formula:~~

$$\text{Base Price} = (\text{CP} * (1 - \text{FP}/\text{CP})) * ((1 + \text{BR})^{\text{N}})$$

~~Where CP is the current price of the cargo service for the route, FP is the final price payable to settle the contract, BR is the Borrowing Rate in percentage divided by 100 and N is number of weeks to providing service as a factor of year.~~

38. (Currently Amended) A method ~~for user to~~ of quantifying cargo space risk by electronically pricing said risk as determine a cargo option price fee to purchase an electronic option contract to be offered to buyers, the method comprising the steps of:

using a central controller having a CPU and memory means;

having a program stored in the memory means;

inputting departure date, arrival date, destination, departure_location and final remaining price payable payment ;

inputting type of cargo and flexibility of arrival date and route criteria information provided by a user;

querying a plurality of carrier cargo systems based on user's input;

~~having the provider's cargo system check the acceptability of the base price as calculated from the final price payable, weighted average cost of capital, time to provide service and current cost of cargo services, check the available departure dates satisfying arrival dates linking to the transporters, check the type of transporter available on this route, if available select a transporter based on type of cargo criteria provider by user, check on load capacity of the chosen transporter, check on cargo space availability on the chosen transporter, historical demand for this type of cargo space, calculates the standard deviation of cargo prices up to current time for this route, check the predicted weather on selected departure date(s) and arrival date(s), check whether the departure date may coincidence with any public holiday or weekends, calculates the number of weeks to departure date(s)~~

if accepted by cargo system response with cargo pricing information to central controller and;

in response to cargo pricing information, for each different departure date(s) available responding cargo system calculating the cargo option fee contract price that gives the

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~~customer-user~~ the contractual right but not obligation to secure within a future period said period equal or less to the period before the selected departure date, the underlying cargo shipping services for a particular route, for a particular service ~~provider and final price~~ which satisfied the user's shipping information and the cargo pricing information provided by corresponding cargo system by having the CPU execute said program; ~~and~~

outputting ~~the cargo option fee-price~~ to the user and update the database where said priced cargo option contract is available for predetermined period to other users if not selected by first user; and

whereby cargo shipping services is by air, rail, sea or space transporters-

39. (Currently Amended) A method for determining cargo option for freight services over a network connected to a central controller linked to at least one service provider cargo system and a plurality of terminals, comprising the steps of :

~~cargo service providers to manage cargo space risk in an interactive electronic exchange between registered users and cargo service providers by electronically pricing said risk as a option fee in accordance to the terms of a contract to secure the underlying cargo service at a pre-agreed final price within a pre-agreed future period; said priced contracts may be sold, bought and settled comprising the steps of: providing the cargo fee schedule for a fixed route and type of cargo to user; receiving cargo shipping information from user in view of securing the services for the particular route;~~

at the central controller;

~~sending said information to service providers' cargo systems;~~

~~querying said information for suitability by connected cargo systems;~~

in response to cargo pricing information received from provider's cargo systems which satisfy cargo shipping information;
and agreeable to provide such a service;

~~determining the number of responding cargo systems and calculating the cargo option price fee contract that gives the customer the contractual right to secure within a future period said period equal or less to the period before the selected departure date, the underlying cargo shipping services for a particular route, for a particular service provider and final price which satisfied the shipping information above; and wherein said calculating is based at least in part on the formula below;~~

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Cargo Option price = $LC * D * L * C * R * V * W * Q * A * CO$

where LC is the load capacity times the base price for the option, D is related to a desired number of weeks before departure date, L is concerning the cargo space demand on the requested route, C is concerning loyalty, R is concerning flexibility, V is concerning the standard deviation of the cargo prices, W is concerning the weather on the departure date, Q is for type of cargo including weight and dimensions, A is for type of carrier and CO is for number of competition on the same route; and

outputting the cargo option fee price to the user and update the database where said priced cargo option contract is available for predetermined period to other users if not selected by first user-

40. (Currently Amended) The method according to claim 39, ~~wherein the step of:~~
includes the step of receiving user's cargo shipping information comprising at least one of the first information

~~receiving a query on the cargo fee for a fixed route and type of cargo from user; receiving cargo shipping requirements information includes final price payable, concerning destination of cargo, second information concerning arrival date of cargo, third information concerning departure location, fourth information concerning departure date, fifth information concerning flexibility of arrival date, sixth information concerning type of cargo and seventh information concerning route criteria provided by a registered user; and~~

a step querying at least one cargo system with said user's shipping information.

~~querying the above data with at least a carrier cargo system where cargo system calculates the base price from final price payable, weighted average cost of capital of service provider, time period to provide service, current cargo service cost for a selected route, satisfactory arrival date of cargo depending on flexibility factor, availability of transporter satisfying arrival and departure date(s), acceptable weather conditions for departure and arrival date(s); and~~

~~provided said queried data are acceptable to cargo system, said system receive cargo information includes current loading capacity of a chosen transporter, historical demand for this type of cargo space, calculating the current standard deviation of cargo prices up to request time for this service route, the base price, acceptable weather data on chosen departure and arrival date(s), data on the departure date may coincidence with any public holiday or weekends, the type of transporter selected on this route, the number of weeks to selected departure dates to central controller, and at central controller, determining the number of cargo systems that actually responded in order to calculate the option fee.~~

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41. (Currently Amended) The method according to claim 39, further comprising the steps of:

~~wherein said cargo system receiving information includes first information describing final price payable, second information describing destination of cargo, third information describing arrival date of cargo, fourth information describing the flexibility of arrival date, fifth information describing the type of cargo, sixth information describing the departure date of cargo, seventh information describing the departure location, eighth information describing the route criteria from user wherein program in cargo system is further means to use at least one of first said information, said second information, said third information, said fourth information, said fifth information, said sixth information, said seventh information, said eighth information to calculate base price, determine planning, and commercial suitability; and~~

~~steps wherein cargo pricing information said central controller receiving information which includes comprising: first information describing a number of weeks before departure, second information concerning the historical demand of this type of cargo space, and third information concerning the standard deviation of the freight cargo prices for of the said route, and fourth information on the current cargo price, and fifth information on the flexibility of the cargo arrival date, sixth information on the loading capacity of the transporter at the time of query, seventh information on the predicted weather prevailing on the date of departure and arrival, eighth information on the timing of the transporter, ninth information on the type of cargo, tenth information on the type of transporter selected, eleventh information on the number of competition on the route, twelfth information on the remaining payment.~~

~~final price payable, thirteenth information on weighted average cost of capital of service provider and wherein said program in central controller is further means to use at least one of said first information, said second information, said third information, said fourth information, said fifth information, said sixth information, said seventh information, said eighth information, said ninth information, said tenth information, said eleventh information, said twelfth information, said thirteenth information to calculate the cargo service option fee.~~

42. (Currently Amended) The method according to claim 39, further comprising:

-the steps of receiving an indication that a user has purchased or sold the cargo option contract;

updating a customer database to record the sale or purchase of the cargo option contract; and posting transaction details to a transaction database accessible by all users.

43. (Currently Amended) The method according to claim 39, further comprising the step of:

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~~receiving a user request for information on cargo pricing;~~
~~providing such information for a fixed route and type of cargo;~~
receiving a user's request in the form of shipping information to purchase an existing
cargo option ~~contract~~;

~~querying the connected cargo systems for interest in the user's request;~~
~~receiving responses if any from cargo systems via central controller with a range of prices~~
~~for contracts closely matching shipping information;~~

scanning for any other ready seller matching at that price or lower in open cargo option
database accessible to all users;

~~receiving acceptance of the selected price of the option contract (s) from the user;~~

~~checking for acceptance of the transaction again with seller;~~
~~displaying the full option contract for user to agree at user's terminal;~~
upon agreement if available, performing a payment transaction through a nominated bank
account by electronic instructions connected to the bank to pay the seller ;
storing information regarding said cargo option contract until expiry or settled which ever
is first in the contracted parties respective accounts; and

posting the transaction details ~~to a transaction database~~ which is accessible ~~by~~ to all
users over the
network.

44. (Currently Amended) The method according to claim 43, wherein the step of
receiving shipping information ~~includes comprising:~~ receiving the range of possible dates
of departure, destination, departure location, dates of arrival, range of possible settlement
price or ~~final remaining payment price payable~~, type of cargo and flexibility of arrival
dates for this route criteria, range of cargo option fee prices acceptable and a selection of
cargo service providers.

45. (Currently Amended) The method according to claim 43 ~~39~~, further comprising the
steps of:

receiving a user's request to settle user's cargo option ~~contract~~;

~~displaying the requested option contract with a selection for either to pay final price or~~
~~cancel at user's terminal;~~
~~receiving user's agreement to settle the final price at user's terminal;~~
verifying the validity of the cargo option;

if verified ask user to performing a payment transaction to pay ~~the final price remaining~~
payment to the service provider responsible for providing the cargo service;

updating the database to reflect the settled cargo service in both the said user's and
service provider's accounts; and

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posting settlement details ~~to a transaction database which is accessible to all users over the network,~~

46. (Currently Amended) The method according to claim 39 whereby the central controller is an electronic cargo option exchange. ~~40, wherein the calculating steps of the option fee is~~

~~based at least in part on the formula:~~

~~$a = \text{Log}(CP/FP)$~~

~~$b = (BR + 0.5 * SD^{\wedge}2) * TY$~~

~~$e = SD * (TY^{\wedge}0.5)$~~

~~$d1 = (a + b) / e$~~

~~$d2 = d1 - SD * (TY^{\wedge}0.5)$~~

~~$\text{Cargo Option Fee} = (CP * \text{SNorm}(d1) - FP * \text{Exp}(-BR * TY) * \text{SNorm}(d2)) * L * LD * R * W * T * Q * A * CO$~~

~~Function SNorm(z)~~

~~$e1 = 2.5066285$~~

~~$e2 = 0.3193815$~~

~~$e3 = 0.3565638$~~

~~$e4 = 1.7814779$~~

~~$e5 = 1.821256$~~

~~$e6 = 1.3302744$~~

~~If $z > 0$ Or $z = 0$ Then~~

~~$w = 1$~~

~~Else $w = -1$~~

~~End If~~

~~$y = 1 / (1 + 0.2316419 * w * z)$~~

~~$\text{SNorm} = 0.5 + w * (0.5 * (\text{Exp}(-z * z / 2) / e1) * (y * (e2 + y * (e3 + y * (e4 + y * (e5 + y * e6))))))$~~

~~End Function~~

where L is the factor related to load capacity, TY in Years to departure, FP is the Final 20 Price Payable, BR is the Borrowing Rate of service provider, LD is a factor concerning the historical demand for this type of cargo space, R is a factor concerning flexibility of cargo arrival date, SD is the instantaneous standard deviation of the freight cargo prices as measured in logarithmic returns, CP is the current cargo price, W is a factor concerning the weather on the departure date and arrival date, T is a factor concerning timing of departure date such as in holiday period or otherwise, Q is factor for type of cargo including weight, dimensions, A is for type of transporter and CO is for number of competition on the same route;

wherein the calculating step of said program in said memory in cargo system calculates the standard deviation of the freight cargo prices or implicitly from transacted option fee

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~~of similar terms; and wherein the calculating step in said program in said memory in cargo system calculates the base price at least in part on the formula:~~

$$\text{Base Price} = (\text{CP} * (1 - \text{FP}/\text{CP})) * ((1 + \text{BR})^N)$$

~~where CP is the current price of the cargo service for the route, FP is the final price payable to settle the contract, BR is the Borrowing Rate in percentage divided by 100 and N is number of weeks to providing service as a factor of year.~~

~~47. (DELETED) Computer executable program at the cargo system with steps operative to control a~~

~~computer, receive input from central controller, stored all inputs on a computer readable medium for determining logistic and commercial suitability of user's shipping information, calculating base price to determine acceptability, calculating standard deviation of freight prices for the selected route, responding to central controller with cargo information over a network comprising;~~

~~a step of receiving final price payable, destination of cargo, arrival date of cargo, departure date, departure location, flexibility of arrival date, type of cargo, and route criteria, collectively known as user's shipping information via central controller from user;~~

~~a step of discovering suitability of user's request at a cargo system involving;~~

~~a step of confirming suitability of weather conditions based on various dates within the limits of user's flexibility factor at cargo system;~~

~~a step of calculating base price and to determine commercial suitability based on date(s), transporter and space availability;~~

~~a step of checking availability of transporter on various dates within the limits of user's flexibility factor at cargo system;~~

~~a step of confirming or rejecting suitability and availability of departure dates at cargo system based on arrival dates flexibility requirements;~~

~~where cargo system determine to response includes steps for;~~

~~selecting a transporter on selected date(s)~~

~~checking historical demand factor for type of cargo space on the requested route and to send this data to central controller;~~

~~sending the base price from cargo system to central controller;~~

~~calculating the number of weeks before departure date(s) assigned by cargo system and send this data to central controller;~~

~~checking the loading capacity of the transporter and send this data to central controller;~~

~~calculating the standard deviation of the freight cargo prices and send this data to central~~

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controller;
assumes the weather conditions for both departure and arrival date(s) and sent this data to central controller;
check the timing of the departure date to see if its within holiday, peak seasons or otherwise and sent this data to central controller;
where cargo system determine to reject request includes steps for;
response with rejection data to central controller;
where a user decides to take up cargo system's offer includes the steps for;
checking the availability and requirements of the initial offer again
respond to central controller either in confirmation or no;
where a user decides to settle option contract, service provider of cargo system includes steps for;
cargo system to change status from booked to sold of the contracted service in its database upon confirmation by central controller confirming payment has been made to service provider's account for the purpose of settlement of this contract cargo service.

48. (Currently Amended) A computer-readable medium storing cComputer executable program implementing the method of claim 39.

at the controller with steps operative to control a
computer, receive input from terminal devices, query cargo systems, receive input from cargo system(s), stored all inputs on a computer readable medium for determining a option
fee to purchase a contractual right but not the obligation to secure a cargo shipping service, display all open option contracts, both bid and offer quotations online over a network comprising:

a step of receiving final price payable, destination of cargo, arrival date of cargo, departure date, departure location, flexibility of arrival date, type of cargo, and route criteria, collectively known as user's shipping information;
a step of sending user's shipping information to a plurality of connected cargo systems;
a step of discovering suitability of requester/user at a cargo system as in claim 47;
a step to receive the number of weeks before departure date(s) assigned by cargo system and assign a factor in years at the controller;
a step to receive and assign the historical demand factor for type of cargo space on the requested route at central controller;
a step to receive the standard deviation of freight cargo prices from cargo system at the controller;
a step of receiving the current price of cargo from cargo system at central controller;
a step to receive and assigned the flexibility factor as sent by the user at central controller;
a step of receiving loading capacity data of selected transporter from cargo system and assign a factor at central controller;
a step to assign a factor to the predicted weather on the departure date(s) and

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~~corresponding arrival date(s) as provided by cargo system at the controller;~~
~~a step to assign a factor to the timing of the transporter's departure date such as in holiday period or otherwise at the controller;~~
~~a step to assign a factor to the type of cargo at the controller;~~
~~a step to assign a factor to the type of transporter at the controller;~~
~~a step to receive weighted average cost of capital of service provider at the controller;~~
~~a step to receive final price payable at the controller;~~
~~a step to assign a factor as determine by the controller as to the number of competitors for this route as determine by the number of cargo system queried and returning satisfactory responses;~~

~~a step to execute the program to calculate the option fee;~~
~~a step to output the option fee;~~
~~a step to ask the user to accept or reject this option fee;~~
~~where user accept this option fee(s), a step to query the selected service provider to confirm before completing the acceptance;~~
~~a step to display the complete option contract at said fee to user for agreement or rejection;~~
~~a step to receive from user either agreement or rejection;~~
~~upon agreement, a step to complete bank payment by debiting funds from buyer's and crediting seller's accounts;~~

~~a step to update option contract in purchaser and seller accounts;~~
~~a step to update option details in transaction database accessible by other users;~~
~~where user reject this option fee or fee(s), a step to provide the user to change the initial shipping criteria;~~
~~and where user cancel this option fee or fee(s), a step to provide this option contract(s) and arranged them to be available to other users for a limited period.~~

49. (Currently Amended) A method of electronically pricing a option fee, originating, pricing and purchasing a cargo option contract from at least one cargo service provider system connected to a central controller for a cargo freight route over a network, comprising the steps of:

~~checking cargo fee by providing route and type of cargo to central controller;~~
~~receiving selected tentative cargo fee including last done price from central controller;~~
~~inquiring the cargo option fee price by providing shipping information to a plurality of at least one cargo systems via central controller over a network by user;~~
~~calculate base price at cargo system;~~
~~determining suitability of shipping information by cargo systems;~~
~~in response to sending cargo pricing information to received by central controller by cargo systems;~~
~~calculating cargo option fee(s) price(s) at central controller;~~

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~~receiving said option fee(s) through central controller from responsive cargo system over a network;~~

outputting the cargo option price(s) for consideration by the user;

receiving an offer by user to purchase the cargo option contract satisfying said shipping information over a network;

~~confirming with seller on the selected option contract again;~~

~~displaying the option contract for agreement or rejection by user;~~

~~upon agreement, purchasing said contract at said option fee;~~

initiating payment instructions to respective banking accounts of buyer and seller to credit the seller and debit the buyer;

upon confirmation of payment, updating both buyer and seller accounts; and

updating ~~transaction cargo option~~ database where cargo option data is available to other users; and

whereby cargo is serviced by air, rail, sea or space carriers.

50. (Currently Amended) The method according to claim 49, further including the step of using said cargo option contract to settle final remaining payment to secure the freight cargo service with the particular cargo service provider.

51. (Currently Amended) The method according to claim 49, wherein said step of ~~checking cargo fee and~~ inquiring on option fee includes providing shipping information ~~such as final price payable~~ comprising: destination of cargo, arrival date of cargo, departure date, departure location, flexibility of arrival date, type of cargo, remaining payment, and route criteria or ranges of said in searchable format over the network via a terminal device.

52. (Currently Amended) A network system implementing the method of claim 49, for originating, selling a option contract to secure a particular cargo service at a particular final price for a particular route within a fixed period over a network, comprising:

~~having a plurality of terminal devices means to communicate with a central controller, having said central controller using a communication means to provide tentative cargo pricing and last done prices to terminal devices based on such a request;~~

~~having said central controller using a communication means to communicate with a plurality of cargo systems with shipping information from said terminal devices, to receive data from cargo systems and to determine a fee for a option contract to secure a freight cargo services within a future date;~~

~~wherein said user terminal device to transmit to the central controller shipping information comprising the final price payable, destination of cargo, arrival date of cargo, departure date, departure location, flexibility of arrival date, type of cargo, and route~~

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~~criteria; wherein said central controller linking and querying each cargo systems with said user's shipping information determining the number of cargo system responses, said responsive cargo system is adapted means to respond by transmitting to central controller the current price and cargo information factors relating to such as current loading capacity of a chosen transporter, historical demand for this type of cargo space, the current standard deviation of freight cargo prices up to request time for this service route, acceptable weather data on chosen departure and arrival date(s), data on coincidence of departure date with any public holiday or weekends, the type of selected transporter on this route, final price payable by user, weighted average cost of capital of service provider; and having said user terminal device to receive from the central controller the option fee(s) as calculated from said data, from at least one service provider or other users with option contracts listed for sale satisfying user's inputs.~~

53. (Currently Amended) A network system implementing the method of claim 50. The system according to claim 52, wherein:
~~having said terminal device is adapted to transmit a user request to purchase the selected option contract;~~

~~having said central controller to confirm with seller offering the selected contract;
having said central controller displaying the complete option contract for agreement or rejection by user;~~

~~upon agreement, having said central controller to perform a payment transaction by debiting the bank account of the user and crediting the bank account of the seller cargo service provider; and
having said terminal device adapted to transmit a user request to settle the option contract according to the terms of option contract by performing a final payment transaction by debiting the bank account of the user and crediting the bank account of the seller cargo service provider.~~

54. (Currently Amended) The system according to claim 52, wherein: A network system for selling an existing cargo option between one user to another user over a network, comprising:

a central controller adapted to implement the steps of:

~~having a seller list existing cargo option in database for sale user sell existing option contracts with attached terms and conditions by listing them in database;
having a buyer select the cargo option contract(s) and confirm selection;
displaying the complete option contract for agreement or rejection by user;
upon agreement confirmation, performing payment transaction to credit the payment from to the seller of the said contracts cargo option and debit the account of the buyer;
updating all the entries by assigning the seller's contractual rights to the new buyer;
notifying the cargo system of the cargo service provider of the selected cargo option;~~

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updating the database for seller, ~~new~~-buyer and service provider's accounts to reflect the changed in ownership, and contractual rights and mutual obligations; and
updating the ~~transaction~~-database with the transaction details accessible by all users online; and
~~having said central controller receiving a fee for its services from the service provider.~~

55 (NEW) A computer system for cargo service provider to manage cargo space by implementing the method of Claim 32.

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Amendments to the specification at page 20

Appendix 2

Using these variables, a suitable algorithm for calculating an appropriate cargo option price or fee is as follows:

Cargo Option Price ~~for AIR CARGO example~~ = $LC * D * L * C * R * V * W * T * Q * A * CO$